DAILY METAL REPORTER
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METALS

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By R. S. REYNOLDS, JR., President
Reynolds Metals Company

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DOMESTIC METAL MARKET REVIEW

WASHINGTON REPORT

METAL STATISTICS

DECEMBER
1959

Bassanio . . .

"but thou, thou meager lead, which rather threaten'st than dost promise aught, thy plainess moves me more than eloquence."

THE MERCHANT OF VENICE
(Act III, Scene II)
The Casket Scene

"Who chooseth me shall gain what many men desire."

"Who chooseth me shall get as much as he deserves."

"Who chooseth me must give and hazard all he hath."

You may recall Portia and the three chests . . . one of gold; one of silver, and a third of lead. In one of them lay her portrait, and to that one of her three suitors who guessed wherein it lay, she, herself, was pledged. Bassanio shrewdly guessed that the plain leaden sheath hid the coveted token.

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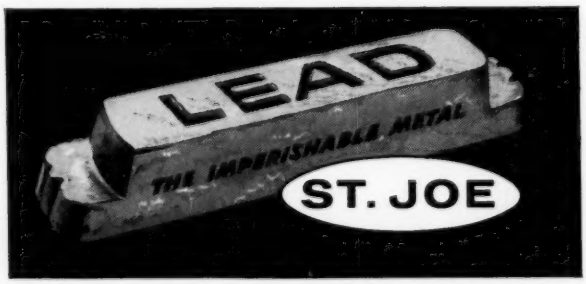

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TWO LINE *Editorials*

Scientists announce that it is now chemically possible to make gold from steel. But, right now, wouldn't a man be silly to use scarce steel for such a purpose?

* * *

George Bernard Shaw left a bequest of $2,000,000 to establish a new alphabet. But that's not surprising; everybody knew he was a man of letters.

* * *

One Congressman suggests that we give foreign aid only to those countries that are friendly to us. Could this be a clever scheme to kill the foreign aid program entirely?

* * *

The National Academy of Sciences is planning a $45,000,000 survey to discover "whether the earth is cooling off or warming up." It has always seemed to us that it cools off in the winter and warms up in the summer.

* * *

One editorial critic says there is "too much brutality" in the Marine Corps training. "Wonder what he thinks is the proper amount of brutality?"

* * *

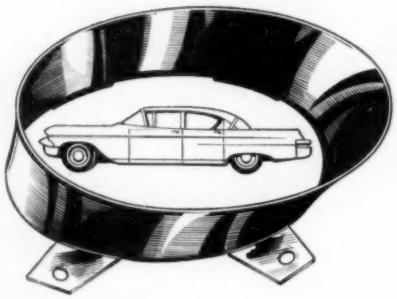
A current magazine articles is entitled "One Trip to Russia Doesn't Make an Expert." Maybe so, but try to tell that to somebody who has just returned from a trip to Russia.

BUSINESS IN MOTION

To our Colleagues in American Business . . .

Recently, a manufacturer of top-flight motor cars was having trouble in producing the escutcheon for the front bumper lamps used on his newest model.

First of all, the breakage of the part was excessively high. Secondly, the escutcheon which is drawn at an angle, and contains a concave surface on the inside presented a problem in that, after buffing, polishing and flash plating, the finish produced did not exactly match the chrome-plated bumper.



Having worked with this manufacturer in helping him successfully solve other metal-working problems, Revere's Technical Advisory Service was called on for consultation.

The possibility of using Revere 70-30 Brass Strip was discussed and after a cost analysis, showed its complete feasibility. Samples were made up for testing on production-line stamping presses. A trial run was made and much to the encouragement of all concerned, there was not one "breaker" in the lot. Switching to this more ductile metal not only resulted in less wear on tools, but it was found that little adjustment of the presses was necessary from that of the setting used on the previous material. Breakage was reduced to less than 1%.

Also, after the escutcheons were polished and plated and recessed in the bumpers, the finish was found to be an excellent match. Here, again, by "fitting the metal to the job" Revere's Technical Advisory Service was able to reduce manufacturing costs while improving the quality of the product.

It is entirely possible that by having Revere's Technical Advisory Service work with your engineers, designers, production men, purchasing agents . . . individually or collectively . . . they can help you, too, realize substantial savings such as these.

And, because practically every industry you can name is able to cite similar instances, we suggest that no matter what your suppliers ship you, it would be a good idea to take them into your confidence and see if you cannot make a better product at lower cost by specifying exactly the right materials.

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Washington Report

December 16, 1959

THE QUESTION of lead and zinc tariffs is often posed in Washington and never answered to the satisfaction of all concerned. In the most recent development, the U. S. Tariff Commission rejected a request of six companies engaged primarily in the smelting and refining of lead and zinc for a formal review of the escape clause action that results in the imposition of annual quotas on imports of unmanufactured lead and zinc.

The commission is currently engaged in a broad investigation of the lead and zinc situation and is scheduled to hold hearings beginning Jan. 12, 1960. It is required to report the results of that investigation to the Senate by March 31, 1960. The investigation should disclose whether the conditions of competition with respect to the trade in imported and domestic unmanufactured lead and zinc appear to have so changed as to warrant a formal review of the escape clause action, it was stated.

In their petition, the companies asserted that quotas are arbitrary and discriminatory in their impact on domestic smelters and refineries. "Some domestic plants which are vital enterprises in the communities where they provide wealth and employment are threatened with being allocated out of business although they may be as efficient as any smelters in the world. The quota system is uneconomic and unfair to these smelters, their employes and the communities in which they operate."

The petitioners suggested that a reasonable increase in import duties would be a better solution to the lead-zinc problem. The quotas confront domestic fabricators with uncertainty as to the continued availability of adequate supplies of metal. Quotas thus "impede consumption and encourage the use of substitute materials," it was stated. Meanwhile, imported lead products not covered by quotas continue to take a larger share of the U.S. market.

The six companies signing the petition are American Smelting & Refining Co., New York; American Zinc, Lead and Smelting Co., St. Louis; Athletic Mining & Smelting Co., Ft. Smith, Ark.; Rockwell Blackwell Zinc Co., Inc., New York; Matthiessen & Hegeler Zinc Co., LaSalle, Ill., and National Zinc Co., New York.

OCDM on Copper Release

In addition to lead and zinc tariffs, the subject of releasing copper from the Defense Production Act inventories is another favorite topic in Capitol corridors. Now that the copper strikes are nearing an end the subject as again moving to the fore. The Government has about 136,000 tons of copper in the DPA inventory which can be released with the approval of the Senate committee that previously (May 1959) objected to such release. Brass mills and wire mills have appealed to the Government to ease the tight supply situation caused by the strikes by making some of this copper available.

OCDM's policy is outlined in the following letter sent to Senator Mansfield (Dem., Mont.) on Nov. 25, 1959, by Mobilization Director Leo A. Hoegh:

"As a matter of background, it might be stated that except for a few insignificant amounts, copper is held under two separate statutes. A substantial amount of copper is held under the Strategic and Critical Materials Stock Piling Act. Section 5 of that act provides, '. . . materials acquired under this Act shall be released for use, sale or other disposition only (a) on order of the President at any time when in his judgement such release is required for purposes of the common defense, or (b) in time of war or during a national emergency with respect to common defense proclaimed by the President. . . .'

"Materials have been released from the stockpile on several occasions by Presidential order when they were required for the common defense. For example, copper was released in varying quantities on August 6, 1951; September 20, 1951; and May 16, 1952, when we were engaged in the Korean hostilities. However, the legislative history of the Act makes it abundantly clear that the President does not have authority to release materials from the national stockpile for the purpose of minimizing the supply and demand fluctuations of a non-war economy. In fact, it is clearly spelled out in the Congressional reports and debates on the Act that the Congress did not want the stockpile to become an economic tool by which the Government could exert control over various elements of the economy, such as prices, wages, and the distribution of supply.

"The government also owns approximately 136,000 tons of copper acquired under the Defense Production Act. While there are no statutory limitations which would prohibit the Government from disposing of this copper at the present time, there are considerations which would militate against such disposal at this time. The issue before the Government is whether it should take the affirmative action of disposing of a relatively small inventory of Defense Production Act copper in an effort to ease the economic pressure brought on by the strike. Such action would clearly affect the relative position of the parties to the dispute and therefore present an important question of public policy.

"The Administration has scrupulously avoided interference with the process of collective bargaining in labor disputes except through such Congressionally authorized means as the use of the Federal Mediation and Conciliation Service. It would not be appropriate to depart from that policy except in the presence of overwhelming considerations of the public interest.

"The probability that collective bargaining will bring about the end of the strike in the near future, and the fact that the limited action available to the Government would be without any real significance if the strike is continued, seem to establish that this not a situation justifying a departure from well-established policy.

"The matter is being carefully followed and after the strike has been terminated, if the shortage continues and unemployment is threatened as a result of the shortage, the Government may well consider the desirability of disposing of some of the Defense Production Act inventory."

Urge Stockpile Expansion

While the Administration's emphasis has been on tapering off purchases for the stockpile, a Government report hinted that Congress should approve larger appropriations for acquiring strategic materials for a possible emergency. The report, requested by Senator James E. Murray (Dem., Mont.) said the Soviet Union is closer to self-sufficiency in minerals than is the U.S. It said that

(Continued on Page 9)

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Forecast for 1960:

Aluminum Growth to Be Vigorous

By R. S. REYNOLDS, JR., President, Reynolds Metals Company

ALUMINUM in 1959 made a sharp recovery from the 1958 recession and went on to set new records in production and sales. In 1960 the industry will continue its vigorous growth, aided by the major breakthroughs we made into new markets in 1959.

Sales. Aluminum shipments to consumers in 1959 were around 2.45 million tons, a one-third increase over the 1.79 million tons used in 1958. The previous record was 2.05 million tons in 1956. Shipments in 1960 should increase 10 to 20 per cent, dependiig on the health of the overall economy and resolution of labor problems in key industries.

Production. Primary aluminum production in 1959 set a new record of about 1.95 million tons, 25 per cent over the 1.57 million tons of 1958 and 16 per cent above the previous peak of 1.68 million in 1956.

Total aluminum supply in 1959, including recovered scrap and imports, was 2.7 million tons, a boost of about 500,000 tons over 1958. Scrap increased more than 25 per cent. Imports of pig aluminum were about the same as in 1958 but semi-fabricated aluminum imports almost doubled the 1958 figure.

The difference between total shipments to consumers of 2.45 million tons and total supply of 2.7 million tons went into enlarged inventories needed to support the higher level of business, and into government stockpiles. Except for a small contract held by a new producer, stockpiling contracts have been completed.

Capacity & Demand. Although the industry's reduction plants operated at a high level, all of the new capacity added in recent years was not fully utilized. It is impossible to synchronize new plant construction precisely with anticipated demand increases, as plants must be large to be economic and they take several years to plant and build.

The industry's highest operating rate in 1959 was 91 per cent of capacity last July. By November a business slowdown due to the steel strike had pulled the three major aluminum producers' operating rates down to about 80 per cent, with the industry as a whole at 85 per cent.

It is entirely possible that growing demand will require nearly all of the industry's capacity some time in 1960, if business in general continues its upswing. A characteristic of the aluminum industry is that it declines more slowly than the economy in a downslide and rushes forward much faster on an upswing.

Business conditions in 1960 would of course be affected by any strikes in major industries. The 116-day steel strike in the fall of 1959 hurt aluminum by forcing shutdown in many aluminum using industries, including big-volume consumers like automobiles and appliances.

Prices. One flaw in our armor as we face the bright market prospects of 1960 is price. All aluminum products are priced too low, considering the increased costs of labor, materials and capital. The price of pig, for example, is 1.3 cents less than two years ago. It is essential that aluminum regain its normal price position as soon as possible.

Breakthroughs. Aluminum in 1959 made major breakthroughs into new uses in automobiles, housing, railroad freight cars, defense vehicles, bridges, containers and electrical applications.

The aluminum engine in Chevrolet's compact Corvair is the first of many in American passenger cars. Reynolds, with its molten aluminum contracts with Chevrolet, General Motors and Ford, is in a good position to participate in this growth.

Other new automotive aluminum uses include a radiator, windshield wiper bodies, oil and fuel pumps, steering gear housings, alternators, integral wheel and brake drums and intake manifolds.

With 1960 expected to be a seven-million-car year, up a million from 1959, aluminum usage in autos is forecast at 230,000 tons, compared to 170,000 tons in 1959.

Fifty leading home builders in principal cities joined with Reynolds in introducing the "House of Ease" concept—homes with all-aluminum exteriors. In each House of Ease city, our promotion of aluminum's advantages influenced other builders to increase their use of aluminum.

National Homes Corporation's successful introduction of a line of aluminum homes further demonstrated the public's desire for the long-life, low-upkeep features of aluminum. National, which builds over 3 per cent of all new homes, has standardized on aluminum exteriors for all of its 1960 lines, with conventional materials optional.

The Lumber Dealers Research Council announced a line of aluminum homes, to be produced and sold through local lumber dealers and home builders. The aluminum products will be supplied by Reynolds and its manufacturer customers.

The architectural and building products markets used about 600,000 tons of aluminum in 1959, nearly a 30 per cent boost over 1958. In 1960 these markets are expected to increase to 700,000 tons.

Railroad breakthroughs resulted from Reynolds product development programs. Southern Railroad ordered 1,200 aluminum gondola and hopper cars, which will require 9,000 tons of aluminum. Southern Pacific placed orders for 100 gondola cars. These cars will have longer life, reduced maintenance costs and increased payload.

Aluminum cross-members, for bracing freight in box cars, went into large-volume production. Aluminum inner liners to protect box car walls were introduced by Reynolds and placed on test by major railroads. Box car doors and refrigerator car floors of aluminum also were on test.

We look forward to more orders for these products, which will save labor, reduce weight, increase payload and cut maintenance costs for railroads. Additional orders for hopper cars are expected, and aluminum box cars are a distinct possibility.

In the armed services, aluminum armo-plated tanks and other vehicles appeared in 1959. New military concepts of fast-moving, air-transportable ground equipment and rocketry will expand this market.

New structural uses of aluminum were seen during the year in the construction of two aluminum highway bridges and aluminum substations and towers for electrical utilities.

A major breakthrough was made into electrical conduit, where aluminum's light weight cuts installation

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labor. Sales mushroomed in the latter part of the year. Aluminum foil strip conductor, pioneered by Reynolds, is getting its first large-scale usage in over 1,000,000 horn coils for 1960 automobiles.

Aluminum cans were used for the first time for beer, were adopted by more oil companies and made initial inroads into frozen orange juice concentrate. The first aluminum 24-bottle carrier for soft drinks was market-tested.

Aluminum foil packaging continued its growth, with new and expanding uses in overwraps, folding cartons, boilable pouches, cereal box liners and foil containers for convenience foods. Reynolds introduced a line of aluminum foil gift wrap nationally through department and gift stores.

Household foil is the fastest-growing item on supermarket shelves. Reynolds introduced the first household foil in colors, plus heavier grades and convenient institutional packages of foil.

International. Many significant world market developments marked the year 1959. Primary production continued to increase, setting a new all-time record of 4.5 million tons for world output.

Western Europe and Japan consumed more primary aluminum and scrap than in any other peace time year. But they also exported a large tonnage of their semi-fabricated output, as well as finished aluminum products.

The principal U. S. producers continued during 1959 to expand their foreign interests. An important step was Reynolds acquisition of a major interest in The British Aluminium Company, Ltd., which has operations in the United Kingdom and interests in several other countries throughout the world.

Reynolds and its associate in the purchase, Tube Investments, Ltd., own a total of 96 per cent of British Aluminium's common stock. We are convinced that markets for aluminum can be developed overseas by companies based there, just as markets have been developed in this country since World War II.

Primary Aluminum Output Declines During November

Primary aluminum production in the United States totaled 153,666 tons during November, a decline of 20,096 tons from the 173,762 tons produced in October, according to figures compiled by The Aluminum Association. Output last month, however, was 12,704 tons greater than the 140,962 tons turned out in November, 1958.

Washington Report

(Continued from Page 5)

Russia has pushed for self-sufficiency in minerals at any cost.

Crops-for-Minerals Swap

One way the U.S. has been building stockpiles has been through the barter of surplus farm crops for strategic materials from abroad. In a recent deal, the Agriculture Department gave private traders the official go-ahead to conclude a $30,000,000 crops-for-minerals barter deal with India. The agency said it is ready to consider contracts arranged by private traders for the shipment of 450,000 metric tons of Government-owned wheat in exchange for Indian manganese ore and ferromanganese. The private barter contractors will obtain the surplus wheat from Federal inventories and turn the Indian minerals over to the Government for stockpiling.

The Agriculture Department also reported that barter contracts with an export value of $34,400,000 were negotiated by the Commodity Credit Corporation in the July-September quarter compared with contracts valued at $62,500,000 in the April-June quarter.

Agricultural commodities exported by barters contractors had an export value of $53,200,000 (812,000 short tons) for the July-September period. Barter exports in the April-June quarter had an export value of $58,100,000.

Materials delivered to CCC by contractors in the July-September quarter had a value of $50,200,000 compared with $62,300,000 during the preceding quarter. As of Sept. 30, strategic materials acquired through barter and held in CCC inventory pending transfer to the stockpile with reimbursement to CCC were valued at $107,200,000. These materials are to be transferred to the supplemental stockpile created by Section 104(b) of Public Law 480.

Revise BDSA Regulation

Metal news also was made when the Commerce Department moved to direct the flow of materials and products more effectively to the nation's military, space and atomic energy production and construction programs.

The Business and Defense Services Administration of the Commerce Department issued the Defense Materials System (DMS) Regulation No. 1—the basic regulation which requires prime contractors and sub-contractors of the Department of Defense, the National Aeronautic and Space Administration and Atomic Energy Commission to employ the priority powers of the Defense Production Act on their purchase orders for materials needed to meet delivery schedules on defense work.

The new DMS Regulation No. 1 replaces the former DMS Regulations No. 1 and 2 which covered production and construction respectively.

Producers of steel, copper, nickel and aluminum alloys, the "controlled materials," are required under the new regulation to accept properly identified top priority orders for which the use of the symbol "DX" has been authorized, without regard to lead times, unless it is impracticable to do so. Such orders also must be accepted by producers without regard to the set-asides for defense programs.

Under the new regulations, allotments of controlled materials will be made only by defense agencies to prime contractors in connection with defense, atomic energy and space programs. No allottments will be made to any sub-contractors, thus substantially reducing the paperwork for a large number of sub-contractors who will no longer have to submit applications for allotments, nor keep allotment records. All producers of "Class A" and "Class B" products will use their customers' or other authorized ratings and symbols to obtain production materials. Class A products are military end items or specialized components, including construction. Class B products, generally speaking, are civilian type end products or components of general use.

Several changes have been made in the listing of controlled materials. Non-nickel bearing stainless steel has been added to the list of steel-controlled materials, and aluminum molten metal, foil and powder, including flake and paste have been added to the list of aluminum-controlled materials. Removed from the list are all steel castings and nickel alloy castings.

Special provision for defense contract laboratories engaged in research and development have been dropped. Research and development is now defined as a Class A product.

PALLADIUM FOUND IN 1803

Palladium, one of the precious platinum group metals, was discovered in 1803 by William Hyde Wollaston, a British scientist.

Zinc Outlook Good for 1960

By SAMUEL H. SACHS, American Zinc Co. of Illinois

FROM all indications the outlook for zinc appears to be very good. This prediction is based on (1) contemplated growth in the production of continuous galvanized sheets, which will increase the use of Prime Western or the so-called tailor-made grade of zinc and (2) the fact that the 1960 automobiles contain more zinc per unit than ever before. This should result in the die casting industry consuming near record-breaking tonnages of special high grade or four-nine zinc.

The galvanized sheet business has been steadily increasing. In 1957, a monthly average of 14,000 tons of Prime Western zinc went into galvanized sheets; in 1958, this rose to 16,000 tons and the first 6 months of this year the average monthly use of zinc in galvanized sheets was 20,000 tons. Of course, the strike resulted in July being cut down to 11,000 tons and August to 4,300 tons. Speaking of the steel strike, we might in passing, mention that zinc producers are rapidly catching up with shipments that were held up during the strike. An interesting statistic here is the fact that the stocks of slab zinc at smelters increased only about 22,000 tons during the four months of the strike at the steel mills; from 169,000 tons on July 1 to 191,000 tons on November 1.

Expect Galvanizing Increase

The steel companies themselves expect the galvanized sheet business to increase, as evidenced by the fact that five new lines for the production of continuous galvanized sheets are being planned by the mills. When these are installed, the continuous sheet capacity in the nation will be increased by 15 per cent.

In the matter of four-nine zinc; the outlook is particularly excellent. Even this fall when the automotive industry has had to drastically curtail production due to shortage of steel, the demand for this grade of zinc has been in excess of the supply. Of course, this condition is partly due to a very large Western producer being shut down by strike.

Auto Industry Strong

The predictions for the automotive industry coming out of Detroit are for a very strong first half of 1960. That the zinc industry will benefit from a banner automotive year goes without saying. Pontiac and Oldsmobiles have returned to putting zinc base die cast grilles on their 1960 models, after having tried another metal for a year or two.

The American Zinc Institute has been engaged in a huge development program at Battelle Memorial Institute and other seats of learning. One of the projects in this program, on which considerable time has been spent, is on improved methods for plating zinc base die castings. Already, important findings have been passed along to platers. It is hoped that better plating methods and results will increase the use of zinc base die castings for decorative trim on automobiles and appliances.

The American Zinc, Lead and Smelting Company is one of six major U.S. smelters that recently petitioned the U.S. Tariff Commission to drop import quotas and replace them with higher tariffs. This group smelts 44 per cent of the zinc smelted in this country, and mines 13.5 per cent of the zinc mined in the U.S. Our contention is that the quota system is basically wrong, and has resulted in a shortage of concentrates.

U. S. Ore Production

In 1958 the United States production of ore was 412,000 tons of recoverable zinc content, while imports of ore were 462,000 tons, or 53 per cent of the total. Since the United States depends so largely on imports for its ore supply, any reduction in this area is certain to result in shortage of ore.

The quota system restricts imports of zinc ore to 72 per cent of the 1957 general imports. The 1957 general imports of zinc ore were 526,000 tons, 72 per cent of which is 380,000 tons. In the year 1958, even with quotas in effect during the last quarter, imports were 462,000 tons. So you can readily see that this year's limitation of ore imports to 380,000 tons was bound to create a shortage of zinc ore. We will have to wait until the Tariff Commission holds hearings on January 12, to learn how this matter will be resolved.

Price Outlook

Price-wise, there are two factors of which we can be sure. Number one is that improved prices are needed to bring in new domestic mines and number two, is that there is a price level at which zinc must not go beyond, lest a too high price encourage the use of competitive metals. Aside from these points, it is our personal opinion, derived from the foregoing optimistic outlook, that barring further stoppages in the steel industry, the zinc price should advance modestly during the first quarter of 1960.

Hydrometals Project

Before closing, we should like to dwell briefly on an interesting project that American Zinc has entered into with Hydrometals, Inc.

This is a joint venture for the exploitation and development of the mining and milling facilities of the Peru Mining Company of Silver City, New Mexico.

These properties, although not having been operated for the past three years, due to low zinc prices, have been fully maintained all of this time.

The concentrates produced here will be smelted and converted to slab zinc at American Zinc's smelter in Dumas, Texas. This zinc in turn will then go to American Zinc's Electrolytic plant at Monsanto, Illinois, to be combined with titanium and copper to produce Hydrometals new alloy, called Hydro-T-Metal.

A particularly interesting feature is that this metal will be cast into 8,000 pound ingots for shipment to the rolling and extrusion mills of the Dow Metal Products Company at Madison, Illinois. Here, the ingots will be rolled into coils of sheet metal or be extruded.

Text of address delivered at Midwestern meeting of the National Association of Waste Material Dealers, Dec. 14, 1959, in Indianapolis, Ind.

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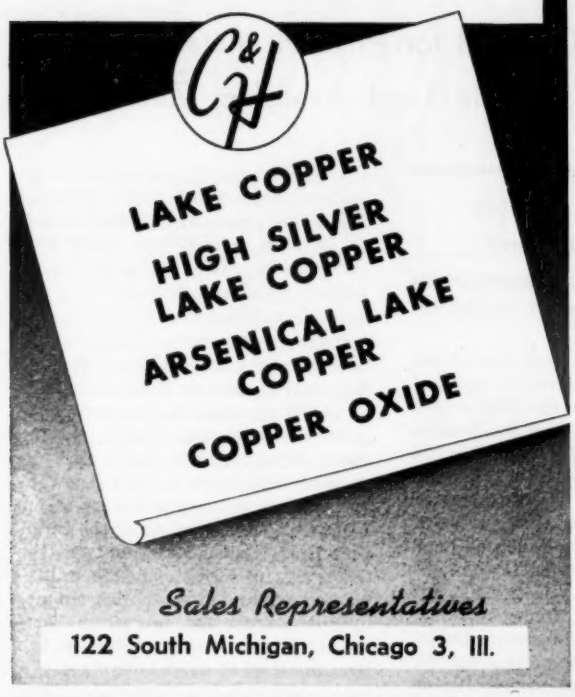

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BRITISH COPPER MARKET IN NERVOUS STATE DUE TO CONTINUED UNCERTAINTY ON U. S. LABOR SITUATION

With Supplies Short, Slight Increase in Demand for Physical Metal Has Wide Price Impact; Tin Quotations Fluctuate; Ample Lead Available; Zinc Steady

November 8, 1959

By L. H. TARRING
London, England

THE COPPER market here during the past month or so has been in a very nervous condition. Uncertainties over the U. S. strike position have remained the outstanding feature and with the stoppage now nearly four months old, it is hardly surprising that the basic position of the metal is now rapidly getting tight. It had been thought that a strike of up to two months duration might have been weathered satisfactorily, in view of the high stocks known to be held by U.S. and other consumers, but the way in which fabricators have managed to keep going in America over such a lengthy period has undoubtedly occasioned a good deal of surprise. Even so, it is obvious that there are consumers on both sides of the Atlantic who are, from time to time, in urgent need of spot metal as, despite the wide backwardation currently prevailing, spot wirebars can be sold at a premium of anything from £10—£15 a ton over the L.M.E. cash price but supplies are few and far between.

The extent to which the market has been influenced by changing expectations with regard to the U.S. strikes is shown by the fact that the London cash price, after rising to £266 a ton with a backwardation of £16, fell away sharply by the end of November to £236.15.0d with a backwardation of only £3.5.0d although there had been no material improvement in the level of official warehouse stocks. This was when it looked as if Kennecott's settlement with the Steelworkers Union would quickly be followed by a general strike settlement and resumption of full production.

In the opening week of December, however, the failure of the looked-for settlement to be reached, coupled with a further substantial drop in L.M.E. warehouse stocks, saw the cash price shoot up to about £255 with a backwardation again of around £16 a ton. This latest rise is partly, at least, accounted for by a brisker continental demand and some new buying by Japan. The point is, of course, that the market has now been so denuded of free supplies that a relatively small increase in demand for physical metal tends to have a disproportionately large effect on the open market price.

It will be seen from the figures below that with the exception of wire, U.K. consumption this year has been on a good scale as, during the first nine months, total consumption was only about 20,000 tons less than in the corresponding period of 1958 although consumption in copper wire was down by no less than 50,000 tons. Since September, the general level of activity at the fabricators here has almost certainly improved. Meanwhile competition in the cable industry remains extremely keen but there are some signs of an improved volume of business and in mains cables one leading producer has raised prices moderately, having come to the conclusion that there is no sense in continuing to operate at unprofitable levels. Whether this will be generally followed remains to be seen. Meanwhile, there continues to be talk of the possibility of further amalgamations in the cable industry in this country.

Early in November, there was a meeting of the International Wrought Non-Ferrous Metals Council in Paris at which a number of producers were present but no communique was issued and, as far as is known, no decisions of importance as far as the general market is concerned were taken. Following the initialling of the European Free Trade Association Pact (the Outer Seven) British and Scandinavian copper and brass fabricators met in this country for an informal exchange of views but no statement has been made as to what took place.

Tin Price Movements

The past month has seen rather more movement in tin prices on the London market than of late. For some little time it had been generally understood that the cash price had been held down to £794 a ton only

U. K. COPPER STATISTICS

Production of refined copper in September showed a substantial increase over the August figures at 9,320 tons of primary (5,902 tons) and 9,964 tons of secondary (5,651 tons) according to the British Bureau of Non-Ferrous Metal Statistics. Stocks of refined copper showed a decline at 66,178 tons (74,347 tons) as did blister at 11,625 tons compared with the August figure of 15,136 tons. Consumers held 34,232 tons of the refined stocks compared with 37,402 tons in August. There was an increase in consumption at 57,367 tons (40,621 tons). Details are given below:

	—9 months ending—		
Unalloyed Copper Products:	**Sept. 1959**	**Sept. 30 1958**	**Sept. 30 1959**
Wire*	22,021	212,073	161,685
Rods, bars & sections	1,670	15,890	14,079
Sheet, strip & plate	5,233	41,886	42,159
Tubes	5,873	45,309	47,794
Castings & Misc.	650	5,850	5,850
Alloyed Copper Products:			
Wire	1,787	11,304	12,978
Rods, bars & sections	12,619	86,521	99,687
Sheet, strip & plate	9,265	65,512	73,894
Tubes	1,867	17,218	15,836
Castings & Misc.	6,481	54,264	53,959
Copper sulphate	1,159	17,945	25,805
Total all products	68,625	573,772	553,726
Copper content of output	57,367	485,594	451,664
Consumption of refined copper†	45,178	386,782	339,590
Consumption of copper and alloy scrap‡ (copper content)	12,189	98,812	112,074

* Consumption of H.C. Copper and Cadmium Copper Wire Rods for Wire and Production of Wire Rods for Export.
† Virgin and Secondary Refined Copper.
‡ Consumption of copper in scrap is obtained by the difference between copper content of output and consumption of refined copper, and should be considered over a period since monthly figures of scrap consumption are affected by variations in the amount of work in progress.

U. K. TIN STATISTICS

According to the British Bureau of Non-Ferrous Metal Statistics, tin consumption during September showed an increase over the August figure at 2,073 tons (1,224 tons). Production also rose to 2,229 tons (plus 20 tons secondary) compared with the previous month's figures of 1,908 tons (14 tons) but stocks showed a decline at 10,624 tons against 10,752 tons in August. Details of consumption of primary tin are given below:

	—9 months ending—		
	Sept. 1959	**Sept. 30 1958**	**Sept. 30 1959**
Tinplate	1,049	7,028	7,338
Tinning:			
Copper wire	48	381	405
Steel wire	10	69	77
Other	72	545	585
Total	130	995	1,067
Solder	220	1,357	1,657
Alloys:			
Whitemetal	263	2,120	2,211
Bronze & Gunmetal	206	1,706	1,478
Other	39	305	319
Total	508	4,131	4,008
Wrought Tin*			
Foil & sheets	20	190	229
Collapsible Tubes	20	204	168
Pipes, wire & capsules	2	29	28
Total	42	423	425
Chemicals†	124	727	1,058
Other uses‡		83	
Total all trades	2,073	14,744	15,553

* Includes Compo and 'B' metal.
† Mainly tin oxide.
‡ Mainly powder.

AVERAGE BRITISH PRICES FOR COPPER, TIN, LEAD, ZINC

(Per Long Ton)

Mean of Bid and Asked Cash Quotation at Close of Morning Session on London Metal Exchange

	COPPER			TIN			LEAD		ZINC	
	Cash	3 Months	Settlement	Cash	3 Months	Settlement	Current Month	3rd Following	Current Month	3rd Following
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1954 Averages	248 17 11	239 17 7	249 0 11	719 8 11	709 17 7	720 6 7	98 8 12	94 7 4	78 5 4	77 16 11
1955 Averages	351 14 11	341 0 3	352 5 6	740 2 12	736 12 11	740 12 8	105 17 3	105 9 6	90 13 4	89 12 3
1956 Averages	328 14 5	324 13 1	329 1 8	787 14 9	774 7 7	788 13 3	116 6 5	114 8 9	97 14 3	95 3 7
1957 Averages	219 8 10	221 0 3	219 12 10	754 15 4	747 10 10	755 3 11	96 12 9	96 13 2	81 11 7	80 1 1
1958 Averages	197 13 3	197 9 3	197 16 11	734 18 6	734 17 11	735 6 1	72 15 8	73 6 10	65 17 12	65 10 12
1959										
January	230 2 0	227 5 10	230 5 0	758 15 6	759 4 9	759 2 10	71 17 0	72 3 3	74 17 8	72 18 8
February	236 4 2	235 10 8	236 7 6	772 9 9	773 9 0	772 15 0	69 19 4	70 16 6	73 13 8	71 19 8
March	248 10 3	247 12 2	248 13 6	779 14 9	783 5 9	780 1 6	69 10 3	71 4 2	75 2 5	73 18 8
April	240 0 5	240 6 6	240 3 5	782 5 3	783 15 5	782 11 4	69 1 0	70 8 4	72 13 9	72 9 2
May	236 4 2	236 11 6	236 6 9	784 4 3	784 10 9	784 10 0	70 16 0	71 13 10	77 7 1	75 17 6
June	230 0 11	230 0 4	230 3 8	788 7 9	789 8 10	788 14 1	69 13 4	71 5 8	78 8 2	77 6 11
July	220 17 6	221 14 9	221 0 3	792 6 6	790 16 4	792 13 6	70 5 0	71 1 2	80 10 7	79 13 4
August	232 16 9	231 9 3	233 0 0	792 18 6	791 18 3	793 4 6	72 3 3	73 3 1	85 5 11	83 19 5
September	230 7 6	230 8 8	230 10 3	792 15 0	792 6 4	793 0 5	70 14 5	72 1 10	86 1 5	84 19 10
October	241 18 5	236 17 5	242 2 11	794 2 9	794 8 2	794 8 2	70 12 5	71 12 2	91 7 4	89 9 2
November	250 11 8	241 7 7	250 18 1	795 7 5	795 14 6	795 13 4	72 2 11	72 7 10	94 18 8	90 3 7

by Buffer Stock sales and early in November all sorts of rumors were circulating as to how much metal was still held in the Buffer Stock. One report published in a financial paper here even suggested that the Buffer Stock holdings had fallen to as little as 3,000 tons. This, however, was denied by the Buffer Stock Manager to the Chairman of the London Metal Exchange Committee who was authorized to state that this estimate was wide of the true position and that previous estimates of 6,000 tons and 6,500 tons were also misleading as to the actual position. He further said that the Buffer Stock Manager and the International Tin Council had the position continually under review and were ready to take action to prevent the price of tin rising to levels which they considered were not in the best interests of the trade and of the object of the Agreement itself.

This warning was, perhaps, timely as on November 10th, the Buffer Stock selling price had been raised from £794 to £799 and on that day cash touched £800 a ton. Following this reassurance by the Buffer Stock Manager, the market became rather cautious pending an announcement by the International Tin Council of the first quarter quotas for 1960, especially as American consumer demand had not developed as rapidly (following the resumption of work in the U. S. steel industry) as had been thought likely. As a result, prices sagged gradually and when it was announced on December 4th that the January/March quota would be raised from 30,000 tons to 36,000 tons prices dipped rather sharply as this was a bigger increase than the London market had generally anticipated.

Meanwhile, it has been officially announced that the Buffer Stock is to sell next year the remaining tin from the British Government's strategic stocks, amounting to 2,417 tons. It looks, therefore, as if there should be no shortages of tin supplies for some little time to come even assuming that settlement of the U. S. steel wage negotiations is reached before the end of the present 80 days period of working.

U. K. LEAD STATISTICS

Lead stocks in the U. K. at the end of September were 63,121 tons (52,816 imported and 10,305 tons of English refined) against the August figures of 66,048 tons (56,138 tons and 9,910 tons) according to the British Bureau of Non-Ferrous Metal Statistics. Production during September rose to 8,817 tons compared with 6,624 tons the previous month. Full consumption details are given below:

	—9 months ending—		
	Sept. 1959	Sept. 30 1958	Sept. 30 1959
Cables	8,569	74,812	69,704
Batteries—as metal	2,684	21,669	21,661
Battery Oxides	2,275	19,781	19,713
Tetraethyl lead	1,649	14,310	17,157
Other oxides & compounds	2,463	18,638	19,245
White lead	780	6,728	5,946
Shot (incl. Bullet rod)	449	3,426	2,959
Sheet & pipe	6,280	48,778	50,407
Foil & collapsible tubes	345	3,151	2,618
Other rolled & extruded	591	4,232	4,937
Solder	1,293	9,920	10,771
Alloys	1,639	13,913	13,235
Miscellaneous uses	1,238	9,266	10,273
Total consumption	30,255	248,624	248,626
of which:			
Imported virgin lead	14,856	123,919	127,684
English refined	7,207	55,659	54,015
Scrap including remelted	8,192	69,046	66,927

U. K. ZINC STATISTICS

According to the British Bureau of Non-Ferrous Metal Statistics, zinc stocks during September rose slightly to 40,995 tons against 40,358 tons a month previously. Of this total consumers held 18,667 tons. Production again showed an increase at 7,111 tons compared with the August figure of 5,860 tons. Consumption details are given below:

	—9 months ending—		
	Sept. 1959	Sept. 30 1958	Sept. 30 1959
Brass	9,658	69,449	78,108
Galvanizing			
of which:	8,952	64,732	70,778
General	3,067	24,656	24,805
Sheet	2,246	14,884	17,905
Wire	1,882	15,060	14,814
Tube	1,757	10,132	13,254
Rolled zinc	2,059	18,508	17,544
Zinc Oxide	2,524	19,644	20,974
Zinc diecasting & forming alloy	5,922	36,015	40,055
Zinc Dust	1,220	7,827	8,572
Miscellaneous uses	935	8,278	8,115
Total all trades	31,270	224,453	244,146
of which:			
Slab zinc			
High purity (99.99%)	6,324	39,359	43,386
Electrolytic & high grade (99.95%)	5,741	42,980	45,732
G.O.B. Prime Western & debased	11,524	81,378	89,799
Other virgin material	224	2,171	1,833
Remelted zinc	517	3,945	4,242
Scrap—(zinc content) zinc metal, alloys & residues	3,107	23,359	24,246
Brass & other copper alloys	3,833	31,261	34,908

Lead Position Unchanged

Just over a month ago, lead prices on the London market improved by several pounds a ton and hopes were raised that perhaps the rather long period of depression in this market was drawing to an end. The higher levels, however, attracted a little more metal to the London market and it soon became clear that there had not been any major change in the fundamental position. By comparison with the last year or two, consumption in this country is quite well maintained and, in fact, is now probably running at a somewhat higher rate than it was a year ago, although in the first nine months of this year, consumption was almost exactly the same as in the corresponding period of 1958.

Taking a broad view, however, there is obviously plenty of lead available on the international market to meet current requirements and with the possibility of zinc supplies being increased in the new year, there is a certain amount of apprehension that this may also mean more lead on the world market. Whilst the long strike in the United States has, no doubt, done a good deal to improve the statistical situation, the pace at which stocks have been eaten up has been rather disappointing so that on neither side of the Atlantic have there been any particularly bullish developments. Although it looks as if prices here might be a little more responsive to any good news that has been the case in recent months, the early outlong is not regarded with a great deal of confidence.

Zinc Remains Steady

Basically, it can be said that there has been little change on the general zinc situation but the terminal market in London continues to suffer from paucity of supplies in nearby

(Continued on Page 16)

COPPER INDUSTRY INCHES ALONG LABOR PEACE ROAD; CUSTOM SMELTER OFFERS FEBRUARY METAL AT 35.00c

Producers Remain at 33.00c; Lead Price Reduced to Pre-Strike Level of 12.00c; Zinc Firm at 12.50c; Aluminum Lifted 1.30c to 26.00c; Tin Market Drifts Along

November 22, 1959

IT BEGINS to look as though the copper strikes may not last forever after all. With Kennecott breaking the ice, the other major producers are expected to be back in the swim soon. Kennecott has reached agreements with the United Steelworkers and with the International Union of Mine, Mill and Smelter Workers but will not be able to resume full operations under it hurdles obstacles imposed by various locals and by the railroad, chemical and other unions. The other major producers are reported inching toward settlements with their various unions.

Prospects of labor peace had different effects on the various metals. In copper, open market quotations softened. In lead, resumption of operations by the American Smelting and Refining Company was quickly followed by two price reductions. Aluminum, however, was a different story. Word that a settlement was imminent in the light metal was accompanied by a price boost—which was said not to reflect any anticipated higher labor costs.

As if the copper supply situation were not bad enough, the shortage has been aggravated by furnace trouble at the large Carteret, N. J. plant of the U. S. Metals Refining Company, a wholly-owned subsidiary of American Metal Climax, Inc. The wall of the largest casting furnace collapsed. During repairs the furnace will be out of production, which will delay overall deliveries. This is the second furnace that is inoperative. One is expected to be back in operation shortly. Late in October one of the converters at Carteret exploded, causing injury to several workers. The company declared force majeure at that time and had to do so again.

The present copper shortage is not likely to be alleviated for 60 to 90 days after the major strikes are ended, in the opinion of some of the leading factors in the industry. The procedure on the part of the companies that are able to resume operations will be to transfer to their January books all the unfilled orders that they had on their books when their plants were struck. Consequently consumers will be getting some copper in January and more in February and to that extent they will be less dependent on dealer copper. After the turn of the year, consumers may again be able to draw on their LIFO copper to tide them over for a while.

Despite the slow pace of strike settlements and the Carteret situation, there has been no panicky buying on the part of consumers. January copper was available from dealers a 37.50c a pound delivered and no interest was shown in December metal at 38.25c. Producers maintained their price at 33.00c a pound. Asarco is offering custom smelter copper for February at 35.00c delivered.

Effect of Strikes

The extent to which the strikes have paralyzed the domestic copper producing industry is evident from the primary output for the month of November which amounted to 18,325 tons. The primary output was slightly less than in October when it came to 20,931 tons. For the three-month period prior to the strike (May-July) the domestic primary production averaged 95,000 tons a month. Including secondary intake in November, the month's crude production was 28,035 tons as compared with 30,792 tons in October, according to figures compiled by the Copper Institute.

With most of the domestic copper refineries idled by strikes that started in August, the November output of refined copper in November was down to 37,299 tons as compared with 44,218 tons in October. For the three months preceding the strike the refined output averaged 135,800 tons a month.

The strikes have also cut down the deliveries of refined copper to brass and wire mills and to foundries. The November deliveries, however, showed some improvement and amounted to 83,626 tons as against 68,648 tons in October. Prior to the strikes the deliveries (for May-July) averaged 131,000 tons a month. These were larger than usual due to the fact that shipments had been stepped up in anticipation of strikes.

At the end of November, the stocks of refined copper in industry and non-industry hands totaled 74,642 tons as compared with 78,308 tons at the end of October, a further decrease of 3,666 tons.

Outside the U.S. where mines were free of strikes, crude output in November came to 174,184 tons as compared with 164,571 tons in October. Refined output in November was 148,619 tons as against 137,489 tons in October.

Deliveries of copper outside the U.S. were 145,625 tons in November compared with 142,297 tons in October.

Surplus stocks of refined copper in the hands of foreign producers at the end of November were 235,859 tons, a further decrease of 16,271 tons.

The combined domestic and foreign crude production in November was 202,219 tons as against 195,364 tons in October. Combined refined output was 185,918 tons in November as compared with 181,707 tons in October.

Combined domestic and foreign deliveries in November came to 229,251 tons as against 210,945 tons in October.

The world stocks of refined copper at the end of November were 301,501 tons, a decrease of 19,937 tons from the stocks at the end of October.

Lead Price Reduced

Lead prices softened soon after settlement of the Asarco strike which restored to production the 40 per cent of the supply which had been cut off. With the London quotation down to the equivalent of about 11.00c a pound, New York duty paid, it was a foregone conclusion that the 13.00c level was vulnerable, especially in view of the fact that more metal was available for sale. The statistical position of lead indicates an oversupply of the metal not only domestically but abroad as well.

A contributing factor to the price declines was the fact that with the strike over, the large custom smelter once more is taking in and pricing substantial tonnages of new concentrates. It has been the policy among custom smelters to try to balance their intake with sales and that when the question of price stands in the way of interesting consumers, the price usually gives way.

Two price reductions of 0.50c

brought the lead price down to 12.00c at New York and 11.80c a pound, St. Louis, the level that prevailed from May 7 to August 24, 1959. On the latter date, following the start of the Asarco strike, the price was raised to 13.00c, but the bulk of the business had been taken at the 12.00c level.

The 12.00c price has brought more consumers into the market and the purchases in most instances involved larger quantities than were bought at the higher level. The buying pattern, however, is still hand-to-mouth. Not as many consumers are anticipating their forward needs to any great extent, banking on their being able to get the lead when they want it. Producers have been receiving requests that metal be shipped immediately, indicating that some consumers waited until the eleventh hour to cover their requirements.

Producers anticipate that good-sized orders will be placed for January shipment since it is generally believed that many consumers are underbought for that month. At this time of the year because of the holidays the consuming demand for lead is usually on the light side.

World Statistics Improve

The Free World's statistical position of lead is showing improvement. On the basis of figures that represent about 87 per cent of the Western World or 70 per cent of the world's total, the deliveries of refined lead in October exceeded world production by 12,006 tons, and the world's stocks of refined lead at the end of October were reduced by that amount, according to statistics compiled by the American Bureau of Metal Statistics.

World output of refined lead in October amounted to 109,742 tons, an increase of 6,025 tons from the preceding month. Of this total, the U.S. output, because of the strikes, was held to 18,793 tons, a gain of about 4,000 tons over the preceding month, and the output in the rest of the world was 90,949 tons, an increase of 2,019 tons. In October the U.S. output represented 17 per cent of the world's total whereas all of 1958, the U.S. output was 32 per cent of the world's total. The domestic strikes have cut down the domestic refined output by about 40 per cent. For the 10 months of the current year the domestic refined output has averaged close to 33,000 tons a month. In all of 1958 the monthly average was about 43,000 tons. Foreign output for the 10 months of 1959 has averaged 93,000 tons a month and in all of 1958 the monthly average was 90,000 tons.

The world deliveries of refined lead in October amounted to 121,748 tons as compared with 106,569 tons in September, an increase of 5,179 tons. For the first 10 months of the current year the deliveries had averaged 128,065 tons a month and in all of 1958 the monthly average was 117,500 tons. Of the October total, the U.S. accounted for 37,400 tons and the rest of the world for 83,348 tons, the U.S. figures showing little change from September and the rest of the world showing a gain of 15,632 tons. The deliveries in the U.S. and in the rest of the world are running ahead of last year. For the 10 months in 1959, the U.S. deliveries have averaged 55,473 tons a month as against 53,300 tons monthly in 1958 and foreign deliveries for the 10-month period have averaged 72,600 tons monthly as against 64,200 tons in 1958.

At the end of October the world's stocks of refined lead amounted to 292,331 tons, a reduction of 12,006 tons. Of the world's total, the U.S. carried 176,119 tons or about 60 per cent and the rest of the world carried 116,212 tons. The U.S. stocks were up about 5,000 tons and outside the U.S. the stocks were down approximately 17,000 tons.

Zinc Market Firm

While the domestic lead market turned weaker recently, zinc has continued to show strength. Sensing that after the turn of the year there is likely to be a rise in the price of zinc, some galvanizers as well as die casters have been trying to place orders for March shipment at the spot price of 12.50c a pound East St. Louis. Were producers willing to book orders at this figure, they could easily dispose of thousands of tons of metal, but few are doing so. The last time that the Prime Western zinc price was advanced from 12.00c to 13.00c a pound on October 22, a whale of a business was booked at the 12.00c level for shipment into January and since October, in addition to the steel strike which cut down the consumption of zinc, the market has had to digest these large purchases. That accounts for the moderate sales at the 12.50c level even though shipments to consumers have been quite substantial. Some producers are unwilling to help lay the groundwork for similar market conditions for February and March. Where a consumer insists on buying for February or March shipment, the business is being booked at the average prices for these months. Fair sized sales have been consummated on that basis.

Asarco Boosts Output

As an indication of the bullish outlook for zinc, Asarco's big Corpus Christi, Texas, zinc plant is stepping up output of Special High Grade Zinc to about 9,000 tons a month. This is the full capacity of the plant, which has been operating at two-thirds capacity for the past two years. Approximately 100 additional employes will be required.

Asarco reports a greatly increased demand for Special High Grade Zinc, which is used principally by the die-casting industry. The large stocks accumulated by the company during the 1958-59 recession have been shipped to customers and plant output is being expanded to keep abreast of current orders.

Big Gain in Shipments

The domestic shipments of all grades of zinc in November amounted to 74,596 tons as compared with 63,910 tons in the preceding month, a gain of 10,686 tons, according to figures compiled by the American Zinc Institute. This increase is chiefly due to the resumption of operations by galvanizing plants that were idled by the 116-day steel strike. For the first eleven months of the current year the shipments to consumers amounted to 788,369 tons, an increase of 97,496 tons or about 14 per cent over the same period in 1958.

Shipments for export and drawback in November were 2,844 tons as against 1,813 tons in October, a gain of 1,031 tons.

The combined domestic shipments and exports in November were 77,440 tons as compared with 65,723 tons in October, a gain of 11,717 tons. For the period January-November 1959, the combined shipments totaled 802,434 tons and in the same period last year they were 728,315 tons, a gain of 74,119 tons, or about 10 per cent.

November output of all grades of zinc was 62,346 tons as against 63,938 tons in October, a decrease of 1,592 tons, due to the fact that November is a shorter month. On a per diem basis, the November output was 2,078 tons as against 2,063 tons in October. The strike at Anaconda properties in Montana is chiefly responsible for the output has been kept low. For the 11 months of the current year the production of all grades of zinc amounted to 788,354 tons and in the same period last year it was 753,399 tons, a gain of 34,955 tons, or about 5 per cent.

It will be noted that the combined shipments in November (77,440 tons), exceeded production (62,346 tons), by 15,094 tons. The surplus stocks of zinc at the end of November were reduced by that amount, bringing them to 176,157 tons, the smallest that they have been since the end of last June. As compared with the stocks at the

end of November 1958, those at the close of last month were 15,587 tons smaller.

Aluminum Prices Boosted

Reflecting a strengthening of world aluminum prices, the Aluminum Company of America took the initiative in restoring the basic aluminum price of 26c a pound which was in effect on August 1, 1957. Alcoa's action, which was followed by other producers, increased the price of 99.5 per cent minimum purity pig by 1.3 cents per pound. On April 1, 1958, when the price of the metal fell in the world market, Alcoa was forced to reduce its price by two cents per pound—from 26 to 24 cents. Subsequently, on August 1, 1958, the United States price was partially restored by seven-tenths of one cent per pound.

Alcoa president Frank L. Magee pointed out that aluminum prices, unlike those of many other commodities, have not reflected the inflationary spiral of recent years. The mere restoration of the basic aluminum price to its 1957 level, he emphasized, does not reflect increased employment costs of more than 25 cents per employee per hour that the company has incurred since August 1957, nor increased material and other costs in the same period. Neither does it reflect additional employment costs that the company is facing as a result of new labor contracts negotiated with unions representing Alcoa employes.

Tin Market Drifting

The tin market is drifting and at the moment there is nothing in the offing to drag it out of the slough of despond. Some traders are of the opinion that after the turn of the year or as soon as the uncertainty is resolved as to whether labor and management will reach an agreement in the steel industry, a resumption of buying on the part of platers is likely to make itself felt. Spot Straits tin closed at 99.00c a pound on December 21 as against the last previous price of 101.00c quoted for November 19.

British Metal Markets

(Continued from Page 13)

metal which showed itself particularly at the November half monthly settlement when prompt metal moved up to £97.5.0d and the backwardation temporarily widened to £7 a ton. At the end November settlement, the backwardation also widened a little but not quite so markedly. After having delayed action sufficiently long for a number of people to have come to the conclusion that there was to be no release from U. K. Government stocks, the Board of Trade announced on November 18th that they would sell 3,000 tons of g.o.b. metal from stock to the agents of the original suppliers and that the metal would be delivered during November. This went a long way to calm the fears entertained by some U. K. consumers of being caught without sufficient metal to maintain their operations as it was felt that should any urgent need arise, a further release of Government metal would be made. For the time being, although consumption is running at a pretty high rate, users seem to be getting enough metal for their immediate requirements and prices have kept fairly steady although on the Metal Exchange the backwardation is uncomfortably wide. There seems every reason to suppose that demand will continue on a good scale for some little time to come and it is becoming fairly generally assumed that in the New Year some relaxation of the present voluntary cuts in supplies will not only be desirable but necessary.

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NATIONAL BUSINESS PRESS **425 West 25th Street, New York 1, N. Y.**

Daily Metal Quotations for November, 1959

The following quotations are taken from the Daily Metal Reporter*
(In Cents Per Pound)

NOVEMBER	Copper					Tin		Lead		Zinc					Aluminum	Antimony	Silver
	Producers' Price Del. Conn.	Custom Smelters' or Outside Price	Electro f. o. b. Refinery	Lake Del.	Aver. Prompt Electrolytic Export Price F.a.s. N. Y.	Straits New York Spot	Straits New York Prompt	New York	Outside St. Louis	Prime West. f. o. b. E. St. Louis	Prime West. Del. N. Y.	Brass Spec. f. o. b. E. St. Louis	High Grade Delivered	Spec. High Grade Delivered	30-Lb. Ingot 99½% Plus (f. o. b.)	Domestic Spot 99.5% f.o.b. Laredo	(Cents Per Ounce) New York
2	30.75	Nom.	Nom.	31.50	Nom.	101.50	101.50	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
4	30.75	Nom.	Nom.	31.50	Nom.	101.375	101.375	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
5	30.75	Nom.	Nom.	33.00	Nom.	101.25	101.25	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
6	31.50	Nom.	Nom.	33.00	Nom.	101.25	101.25	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
9	31.50	Nom.	Nom.	33.00	Nom.	101.25	101.25	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
10	31.50	Nom.	Nom.	33.00	Nom.	101.75	101.50	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
12	33.00	Nom.	Nom.	33.00	Nom.	101.50	101.50	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
13	33.00	Nom.	Nom.	33.00	Nom.	101.375	101.125	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
16	33.00	Nom.	Nom.	33.00	Nom.	101.125	101.00	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
17	33.00	Nom.	Nom.	33.00	Nom.	101.125	101.00	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
18	33.00	Nom.	Nom.	33.00	Nom.	101.125	101.00	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
19	33.00	Nom.	Nom.	33.00	Nom.	101.00	101.00	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
20	33.00	Nom.	Nom.	33.00	Nom.	100.875	100.875	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
23	33.00	Nom.	Nom.	33.00	Nom.	100.625	100.625	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
24	33.00	Nom.	Nom.	33.00	Nom.	100.25	100.25	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
25	33.00	Nom.	Nom.	33.00	Nom.	100.50	100.50	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
27	33.00	Nom.	Nom.	33.00	Nom.	100.50	100.50	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
30	33.00	Nom.	Nom.	33.00	Nom.	100.00	100.00	13.00	12.80	12.50	13.00	12.75	13.75	14.00	26.80	29.00	91.375
AV.	**32.375**	**Nom.**	**Nom.**	**32.833**	**Nom.**	**101.021**	**100.972**	**13.00**	**12.80**	**12.50**	**13.00**	**12.75**	**13.75**	**14.00**	**26.80**	**29.00**	**91.375**
HI.	**33.00**	**Nom.**	**Nom.**	**33.00**	**Nom.**	**101.75**	**101.50**	**13.00**	**12.80**	**12.50**	**13.00**	**12.75**	**13.75**	**14.00**	**26.80**	**29.00**	**91.375**
LO.	**30.00**	**Nom.**	**Nom.**	**31.50**	**Nom.**	**100.00**	**100.00**	**13.00**	**12.80**	**12.50**	**13.00**	**12.75**	**13.75**	**14.00**	**26.80**	**29.00**	**91.375**

* When split quotations prevail the daily average price is listed. The highs and lows for the month take into consideration the levels reached at both sides of such ranges.

United States Duties on Principal Ore and Metal Imports

(Including Revisions in Effect June 30, 1957, Under Geneva Agreements)

(Quantities Are in Pounds Unless Otherwise Stated; n.s.p.f. Stands for "Not Specially Provided For.")

COPPER

NOTE — The excise tax of 4c a pound on copper (which was reduced to 2c a pound by the Geneva Trade Agreement) was suspended in April, 1947, until March 31, 1949, and on expiration it was further suspended until June 30, 1950. The tax was reimposed on July 1, 1950. It was suspended again on May 22, 1951, retroactive to April 1, 1951, and until February 15, 1953, and again until June 30, 1954. Suspension further extended to June 30, 1955, and again until June 30, 1958. If import tax is restored, the 1956 Geneva Agreement provides for 5% reductions effective on June 30 of 1956, 1957 and 1958, provided the price is above 24c; if the price is below 24c the 2c tax would prevail.

Copper ore and concentrates, usable as flux, etc., copper content ..... 1.70c lb.
Copper ore and concentrates, product of Cuba, copper content ..... free
Copper ore and concentrates, product of Philippines, copper content ..... 0.17c lb.
Copper ore and concentrates, copper content .. 1.70c lb.
Regulus, black, or coarse copper, and cement copper, copper content ..... 1.70c lb.
Unrefined black, blister, and converter copper in pigs or converter bars, copper content ..... 1.70c lb.
Refined copper in ingots, plates or bars, copper content ..... 1.70c lb.
Copper rolls, rods or sheets ..... 1¼c lb. (plus 1.70c lb. ††)
Copper seamless tubes and tubing ..... 3½c lb. (plus 1.70c lb. ††)
Copper plain wire ..... 12½% (plus 1.70c lb. ††)
Copper brazed tubes† ..... 4.50c lb. (plus 1.70c lb. ††)
Old and scrap copper, fit only for remanufacture: and scale and clippings, copper content .... 1.70c lb.

†† Copper content.

BRASS

Brass rods, sheets, plates, bars, strips, Muntz or yellow metal sheets, sheathing, bolts, piston rods, shafting and bronze rods, tubes and sheets ..... 2c lb.
Brass tubes and tubing, seamless ..... 2c lb.
Brass tubes, brazed, angles and channels ..... 6c lb.
Brass and bronze wire 12½%

LEAD

NOTE — Import duties on lead-bearing ores, flue dust, and mattes of all kinds, lead bullion or base bullion, lead in pigs and bars, lead dross, reclaimed lead and antimonial lead were suspended February 12, 1952, and reimposed on June 26, 1952. Lead scrap duty was reimposed July 1, 1952.

Lead-bearing ores and mattes, n. s. p. f., lead content ..... ¾c lb.
Bullion or base bullion, lead content ..... 1 1/16c lb.
Pigs and bars, lead content ..... 1 1/16c lb.
Reclaimed, scrap, dross, lead content ..... 1 1/16c lb.
Babbitt metal and solder, lead content ..... 1 1/16c lb.
Pipe, sheets, shot, glaziers' lead, and wire ... 1 5/16c lb.
Type metal and antimonial lead, lead content ..... 1 1/16c lb.
White lead ..... 1.05c lb.
Litharge ..... 1¼c lb.
Red lead ..... 15/16c lb.
Orange mineral ..... 1c lb.

ZINC

NOTE — Import duties on zinc-bearing ores, and on zinc in blocks, pigs and slabs were suspended February 12, 1952, and reimposed on July 24, 1952. Tax on old zinc and dross and skimmings reimposed July 1, 1953.

Zinc-bearing ores, except pyrites containing not more than 3% zinc, zinc content ..... 6/10c lb.
Zinc contained in zinc-bearing ores, n. e. s., not recoverable, zinc content ..... 6/10c lb.
Zinc, old and worn out, fit only for remanufacture ..... ¾c lb.
Dross and skimmings ..... ¾c lb.
Zinc in blocks, pigs or slabs ..... 7/10c lb.
Zinc in sheets ..... 1c lb.
Zinc sheets, plated with nickel or other base metal, or solutions ..... 1⅛c lb.
Zinc dust ..... 7/10c lb
Zinc die-casting alloys 12½%
Zinc oxide and leaded zinc oxides containing not more than 25% lead, dry ..... 3/5c lb.
ground in or mixed with oil or water ..... 1c lb.

MISCELLANEOUS METALS AND ORES

Aluminum, metal and alloys, crude, except alloys elsewhere provided for† ..... 1.25c lb.
Aluminum scrap ..... free
Aluminum plates, sheets, bars, rods, circles, squares, etc.† ..... 2.50c lb.
Antimony ore, antimony content ..... free
Antimony metal and regulus ..... 2c lb
Antimony needle or liquidated ..... ¼c lb
Antimony oxide ..... 1c lb
Antimony sulphides ..... ½c lb. & 12½%
Arsenic, metallic† ..... 2.50c lb.
Arsenious acid or white arsenic ..... free
Bauxite, crude* ..... free
Bauxite, refined** ..... ¼c lb
Bismuth 1⅞%
Bismuth salts and compounds 35%
Beryllium metal† 21%
Beryllium ore ..... free
Cadmium ..... 3¾c lb.
Cadmium flue dust, cadmium content ..... free
Chrome ore or chromite ..... free
Chrome or chromium metal† 10½%
Cobalt metal ..... free
Cobalt ore and concentrates, cobalt content ..... free
Magnesium, metallic† 50%
Magnesium powder, sheets, wire† ..... 17c lb. & 8½%
Magnesium alloys ..... 20c lb. & 10%
Magnesium scrap ..... free
Manganese ores, containing over 10% manganese, manganese content ..... ¼c lb., except Cuba, free
Molybdenum ore or concentrates, molybdenum content† ..... 30c lb.
Nickel ore, matte and oxide ..... free
Nickel and alloys, nickel chief value, n. s. p. f., in pigs, ingots, shot, cubes, grains, cathodes, or similar forms ..... 1¼c lb.
Nickel, bars, rods, plates, sheets, castings, strips, wire or electrodes 12½%
Nickel scrap ..... free
Nickel tubes, tubing ..... 6¼% (if cold rolled, drawn or worked — 2½% extra)
Platinum, grain, nuggets, sponge and scrap, oz. troy .. free
Platinum in ingots, bars, sheets, or plates, not less than ⅛ in. thick, oz. troy ..... free
Platinum, ores, platinum content, oz. troy ..... free
Quicksilver or mercury ..... 25c lb.
Selenium and salts ..... free
Tantalum 12½%
Tin ore, cassiterite, and black oxide of tin, tin content ..... free
Tin in bars, blocks, pigs, grain, granulated, and scrap, and alloys, chief value tin, n. s. p. f. ..... free
Tungsten ore or concentrates, tungsten content ... 50c lb.

*Crude bauxite import duty suspended through July 15, 1960. **Under Public Law 25 alumina imported for use in aluminum production is free for entries from July 17, 1956 through July 15, 1960. †Tariff reduced 5% on June 30, 1958, under Geneva Agreement which expires on June 30, 1959.

Copper Statistics Reported by Copper Institute

Combined Totals in U. S. A. and Outside U. S. A.

(In tons of 2,000 pounds)

	Crude Production		Refined	Deliveries to Refined Stock		Stock Increases or Decreases		
	Primary	Secondary	Production	Customers	End of Period	Blister	Refined	Total
1957								
Total	2,897,719	123,270	3,035,588	2,853,307	458,340	—14,599	+103,920	+89,321
1958								
November	227,916	17,755	230,109	261,097	236,774	+15,562	—32,880	—17,318
December	253,512	8,883	282,191	260,841	258,874	—19,796	+22,100	+ 2,304
Total	2,707,926	138,696	2,805,622	2,916,588	258,874	+41,000	—199,466	—158,466
1959								
January	257,682	12,377	270,995	248,574	284,545	— 936	+22,001	+21,065
February	244,405	12,737	264,018	243,741	304,303	— 6,876	+19,578	+12,882
March	270,248	17,019	285,425	270,768	319,241	+ 1,842	+14,938	+16,780
April	265,937	15,653	278,959	270,262	329,871	+ 2,631	+10,630	+13,261
May	279,629	11,695	283,024	266,378	350,343	+ 8,300	+20,472	+28,772
June	277,855	12,347	284,420	294,232	345,429	+ 5,782	— 4,914	— 868
July	256,729	9,198	274,752	231,138	374,519	+16,583	—15,035	+ 1,584
August	232,944	4,552	223,452	237,944	378,649	+11,543	—11,519	+ 24
September	186,837	7,652	187,294	232,282	354,926	+ 7,195	—23,723	—16,528
				(Oct. 1)	356,614			
October	184,409	10,955	181,707	210,945	330,438	+13,657	—26,176	—12,519
November	191,588	10,631	185,918	229,251	310,501	+16,301	—19,937	— 3,636
In U. S. A.								
1957								
Total	1,116,380	112,060	1,616,964	1,277,946	181,024	.....	+60,379	.....
1958								
November	96,369	16,755	128,048	131,188	93,596	.....	—34,894	.....
December	97,641	7,911	146,978	116,310	80,722	.....	—100,302	.....
Total	1,008,170	131,294	1,446,540	1,179,416	80,722	.....	—12,874	.....
1959								
January	95,542	11,284	137,361	114,425	80,780	.....	+ 58	.....
February	88,432	11,425	142,235	120,134	85,523	.....	+ 4,743	.....
March	101,410	16,120	140,928	124,220	85,952	.....	— 2,751	.....
April	98,376	14,287	137,490	135,233	74,323	.....	— 8,629	.....
May	104,236	9,933	135,031	135,135	86,132	.....	+11,809	.....
June	99,419	11,352	138,403	150,117	85,674	.....	— 458	.....
July	81,662	8,323	134,020	108,127	103,432	.....	+17,558	.....
August	51,327	3,994	83,677	90,123	94,109	.....	— 9,323	.....
September	19,503	6,578	44,468	92,501	79,826	.....	—14,283	.....
				(Oct. 1)	81,514			
October	20,931	9,861	44,218	68,648	78,308	.....	— 3,206	.....
November	18,325	9,710	37,299	83,626	74,462	.....	— 3,666	.....
Outside U. S. A.*								
1957								
Total	1,783,119	11,210	1,418,624	1,575,361	277,316	.....	+43,541	.....
1958								
November	131,334	980	102,061	129,909	143,178	.....	+ 2,014	.....
December	155,871	972	135,213	144,531	178,152	.....	+34,974	.....
Total	1,699,756	7,402	1,359,082	1,737,172	178,152	.....	—99,164	.....
1959								
January	162,140	1,093	133,634	134,149	203,765	.....	+21,943	.....
February	155,973	1,312	121,783	123,607	218,780	.....	+15,015	.....
March	168,838	899	144,497	146,548	236,232	.....	+17,502	.....
April	161,561	1,366	141,469	135,029	255,548	.....	+19,259	.....
May	175,393	1,762	147,993	131,243	264,211	.....	+ 8,663	.....
June	178,436	995	146,017	144,115	259,755	.....	— 4,456	.....
July	175,067	857	140,732	123,011	286,122	.....	+26,367	.....
August	181,617	558	142,276	147,821	284,540	.....	— 2,196	.....
September	167,354	1,047	142,646	139,781	275,100	.....	— 9,440	.....
October	163,478	1,093	137,489	142,297	252,130	.....	—22,970	.....
November	173,263	921	148,619	145,625	235,859	.....	—16,271	.....

* Excluding Russia, Yugoslavia, Norway, Sweden, Japan and Australia.

Electrolytic Copper

Producers' Price, Del. Valley
Monthly Average Prices
(Cents Per Pound)

	1956	1957	1958	1959
Jan.	43.00	36.00	25.69	29.00
Feb.	44.03	33.318	25.00	29.972
Mar.	46.00	32.00	25.00	31.14
Apr.	46.00	32.00	25.00	31.50
May	46.00	32.00	25.00	31.50
June	46.00	30.955	25.36	31.50
July	41.56	29.25	26.125	30.587
Aug.	40.00	28.639	26.50	30.00
Sept.	40.00	27.031	26.50	30.571
Oct.	39.308	27.00	27.548	30.75
Nov.	36.00	27.00	29.00	32.375
Dec.	36.00	27.00	29.00	....
Aver.	41.992	30.183	26.31	....

Electrolytic Copper

Custom Smelters' Price, Del. Valley
Monthly Average Prices
(Cents Per Pound)

	1956	1957	1958	1959
Jan.	50.22	34.87	24.577	29.429
Feb.	52.07	32.273	23.557	30.361
Mar.	53.11	30.952	23.326	33.21
Apr.	48.88	31.24	23.66	32.84
May	44.221	30.163	23.865	32.00
June	40.00	29.60	25.52	31.477
July	38.14	28.39	29.231	29.52
Aug.	39.32	27.862	26.52	30.056
Sept.	39.00	25.948	26.355	33.00
Oct.	37.192	25.722	28.577	33.00
Nov.	35.95	25.435	29.829	Nom.
Dec.	35.45	25.26	28.846	....
Aver.	42.797	28.93	25.905	....

Lake Copper

Producers' Price Delivered
Monthly Average Prices
(Cents Per Pound)

	1956	1957	1958	1959
Jan.	43.00	36.00	25.69	29.00
Feb.	43.783	33.182	25.00	30.00
Mar.	46.00	32.00	25.00	31.14
Apr.	46.00	32.00	25.00	31.50
May	46.00	32.00	25.00	31.50
June	46.00	30.955	25.00	31.50
July	41.68	29.25	25.75	30.587
Aug.	40.00	28.611	26.50	30.00
Sept.	40.00	27.00	26.50	31.107
Oct.	39.321	27.00	27.577	31.50
Nov.	36.00	27.00	29.00	32.833
Dec.	36.00	27.00	29.00	....
Aver.	41.975	30.162	26.251	....

Fabricators' Copper Statistics

(In tons of 2,000 pounds)

	Fabricators' Stocks of Refined Cop.	Unfilled Purchases of Refined by Fab. from Producers	Fabricators' Working Stocks	Unfilled Sales by Fabricators to Customers	Actual Copper Consmd. by Fabricators	Excess Fabricators' Stocks Over Orders Bkd.
1953						
Total	380,881	25,022	309,664	170,917	1,375,869	— 74,678
1954						
Total	360,526	58,125	304,619	136,581	1,231,840	— 22,549
1955						
Total	.....	.....	.....	.....	1,418,241	.....
1956						
Dec.	437,187	117,601	336,217	183,834	99,223	+ 34,737
Total	.....	.....	.....	.....	1,416,378	.....
1957						
Mar.	429,410	104,551	338,454	164,623	106,170	+ 30,884
Apr.	429,708	98,638	335,921	164,410	117,041	+ 28,015
May	434,852	92,943	336,697	170,476	115,355	+ 20,622
June	426,905	82,919	340,743	153,042	110,527	+ 16,039
July	432,918	85,728	341,684	144,410	77,991	+ 32,552
Aug.	429,627	82,768	344,315	144,375	110,323	+ 23,826
Sept.	425,168	80,436	344,530	144,538	106,927	+ 16,536
Oct.	420,130	80,774	341,869	138,420	119,161	+ 20,615
Nov.	428,520	68,249	345,832	128,719	98,725	+ 22,218
Dec.	430,171	75,627	347,465	138,631	83,067	+ 19,702
Total	.....	.....	.....	.....	1,279,086	.....
1958						
Jan.	445,514	57,917	348,426	123,756	94,642	+ 31,249
Feb.	452,673	52,342	351,035	128,330	86,625	+ 25,650
Mar.	448,125	71,693	346,875	141,387	83,694	+ 31,556
Apr.	450,442	76,602	347,607	145,623	79,613	+ 33,814
May	441,001	78,194	346,404	138,190	88,447	+ 34,601
June	433,526	72,383	330,301	145,162	109,011	+ 30,448
July	431,796	77,362	326,263	153,529	79,353	+ 29,366
Aug.	421,931	78,194	323,667	150,436	96,717	+ 26,022
Sept.	416,887	71,025	319,281	145,390	105,474	+ 28,941
Oct.	399,113	91,019	315,929	156,692	138,017	+ 17,511
Nov.	419,914	88,580	328,238	157,799	110,487	+ 22,457
Dec.	447,123	90,401	326,438	177,869	92,573	+ 35,217
Total	....	....	....	....	1,165,364	....
1959						
Jan.	457,387	101,182	337,761	172,698	108,556	+ 44,070
Feb.	459,046	123,321	390,522	183,113	116,565	+ 58,732
Mar.	449,441	130,785	334,904	211,547	133,259	+ 33,775
Apr.	463,582	125,250	337,282	204,618	120,680	+ 46,932
May	474,657	133,694	338,835	210,424	124,060	+ 59,092
June	492,072	111,229	343,585	191,875	133,702	+ 67,841
July	518,699	110,367	357,474	193,338	81,500	+ 68,254
Aug.	487,259	97,786	359,049	191,476	121,563	+ 34,520
Sept.	462,880	111,675	360,760	206,254	116,880	+ 7,541
Oct.	431,612	119,806	347,136	211,359	100,302	— 7,077
Nov.	412,401	127,162	338,856	224,442	102,837	— 23,735

Scrap Copper Receipts by Custom Smelters and Refineries in United States*

(In Short Tons)

	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Jan.	15,763	6,640	4,528	6,486	9,859	11,047	14,322	17,506	16,024	14,511
Feb.	12,500	5,153	3,633	10,337	8,490	15,198	14,497	11,145	9,518	14,712
Mar.	13,538	7,912	5,243	19,991	9,738	12,198	15,921	13,934	11,783	19,522
Apr.	12,304	8,553	6,214	16,583	9,004	13,162	17,233	14,288	15,279	17,525
May	8,749	8,458	8,033	10,857	8,687	15,133	20,805	12,397	13,989	13,960
June	20,523	8,628	4,425	10,945	13,309	14,765	14,758	11,949	13,945	15,065
July	10,040	6,642	5,188	9,063	10,260	9,988	12 632	8,926	12,185	11,144
Aug.	10,452	6,113	5,003	7,137	10,100	12,197	12,510	11,645	11,896	7.468
Sept.	4,903	3,561	4,667	9,042	10,641	15,037	9.518	9,756	9.268	10,070
Oct.	9,459	3.336	4.602	10 065	11.662	12,897	15 570	13,151	23,088	12,860
Nov.	9,237	3,179	4,724	7,815	10,879	9,865	11,369	11,146	16,425	11,773
Dec.	7,178	4,538	6,208	11,476	14,876	13,180	14,613	11,237	10,796	....
Total	142,067	71,812	62,470	129,798	127,449	154,714	173,748	147,080	164,196	....

* As compiled by Copper Institute.

Brass and Bronze Ingot Monthly Shipments

(NET TONS)

The following figures showing the combined shipments of ingot brass and bronze are compiled by the Ingot Brass and Bronze Industry and represent in excess of 95 per cent of the deliveries of the entire industry.

	1949	1950	1951	1952	1953	1954	1955	1956	1957	1958	1959
Jan.	19,456	18,874	28,416	28,315	23,423	20,661	25,201	27,736	25,681	20,468	22,046
Feb.	15,026	18,487	27,168	24,211	25,429	19,920	25,349	24,949	20,769	17,413	23,746
Mar.	14,550	22,494	31,997	23,890	28,256	23,653	29,713	28,310	21,948	18,825	26,197
Apr.	10,695	22,118	30,473	22,547	25,044	24,746	27,641	25,808	23,507	18,009	26,115
May	11,114	23,643	33,267	21,740	21,660	22,269	23,708	23,437	22,037	17,191	23,967
June	9,696	25,093	33,817	21,274	20,818	22,348	23,141	18,842	18,888	17,962	22,922
July	10,220	21,609	32,016	18,947	19,321	17,074	18,513	17,364	16,695	16,658	20,346
Aug.	14,194	29,689	25,285	21,807	20,156	21,684	27,013	23,812	19,654	17,882	21,741
Sept.	16,208	28,811	22,285	22,770	21,463	22,464	26,349	20,929	19,670	20,540	22,685
Oct.	18,026	32,240	23,124	25,811	22,280	24,080	25,228	23,045	22,800	23,225	23,067
Nov.	18,488	31,748	23,544	23,441	21,806	23,061	25,102	21,818	19,767	20,758	....
Dec.	17,950	28,575	20,987	22,983	20,541	21,274	21,448	18,046	16,875	18,676	....
Total	175,643	303,563	332,378	277,736	271,251	263,233	298,406	274,096	248,297	227,607	....
Aver.	14.637	25.297	27.615	23,145	22,694	21,936	24,867	22,841	20,681	18,133	....

Mine Production of Copper in United States

(U. S. Bureau of Mines)
(In short tons)

	Eastern	Missouri	Western	Total
1956				
Ttl.	79,681	2,130	1,018,496	1,100,307
1957				
Dec.	6,962	67	81,080	88,109
Ttl.	79,369	1,800	995,753	1,076,922
1958				
April	7,035	161	76,911	84,107
May	6,522	152	71,717	78,391
June	5,801	155	62,296	68,252
July	4,188	132	56,672	61,222
Aug.	5,570	127	61,342	67,039
Sept.	5,312	114	77,561	82,987
Oct.	7,002	60	85,075	91,518
Nov.	6,617	60	87,379	94,056
Dec.	6,614	70	88,070	94,514
Ttl.	76,849	1,250	902,021	980,304
1959				
Jan.	6,590	126	90,386	97,102
Feb.	5,883	130	81,889	87,902
Mar.	6.513	140	91,499	98,152
Apr.	7,240	150	93,295	100,685
May	7,007	110	94,277	101,394
June	7,245	124	86,861	94,230
July	6,763	124	80,488	87,375
Aug.	6,813	116	47,474	54,403
Sept.	6,655	123	19,159	25,937

Average Custom Smelters' Scrap Buying Prices

(Cents per pound for carload lots del. consumers' works)

	No. 1 Copper Scrap	No. 2 Copper Scrap	Light Copper Scrap	Refinery Brass*
1958				
Aug.	22.62	21.12	18.87	20.12
Sept.	22.37	20.87	18.62	19.87
Oct.	24.80	23.30	21.05	22.30
Nov.	25.597	24.097	21.847	23.097
Dec.	24.356	22.856	20.606	21.856
Aver	**21.788**	**20.282**	**18.035**	**18.047**
1959				
Jan.	25.29	23.79	21.54	22.79
Feb.	26.42	24.92	22.67	24.11
Mar.	28.79	27.29	25.04	26.79
Apr.	28.04	26.50	24.29	26.04
May	27.81	26.31	24.06	25.81
June	26.80	25.30	23.05	24.80
July	25.14	23.64	21.39	23.14
Aug.	25.762	24.762	22.012	23.762
Sept.	26.369	24.869	22.319	24.369
Oct.	27.929	25.405	23.155	24.905
Nov.	30.00	26.208	23.958	24.528

*Of dry content for material having a dry copper content in excess of 60%.

Brass Ingot Makers' Scrap Copper Buying Prices

(Average Prices)

(Cents per pound del. refinery for 60,000 lbs. of each grade)

	No. 1 Copper Scrap	No. 2 Copper Scrap	No. 1 Composition	Heavy Yellow Brass
1958				
Sept.	22.37	20.87	18.88	12.90
Oct.	24.80	23.30	20.51	14.938
Nov.	25.597	24.097	20.182	14.125
Dec.	24.356	22.856	19.038	13.038
Aver.	**21.777**	**20.277**	**18.653**	**13.024**
1959				
Jan.	25.29	23.79	19.70	13.982
Feb.	26.42	24.92	21.08	15.08
Mar.	28.79	27.29	22.85	16.85
Apr.	28.04	26.54	21.69	15.70
May	27.81	26.31	21.17	15.17
June	26.80	25.30	21.159	15.307
July	25.14	23.64	20.13	14.47
Aug.	25.762	24.262	21.286	14.81
Sept.	26.369	24.869	22.304	16.50
Oct.	27.595	25.405	22.19	16.048
Nov.	29.00	26.208	22.75	16.326

Lead Statistics Reported by American Bureau of Metal Statistics

Lead Refineries in U. S. A. and Outside U. S. A.

(Recoverable Lead Content in Tons of 2,000 Pounds)

Combined U. S. A. and Outside U. S. A.

	REFINED PRODUCTION			DELIVERIES			STOCKS		
1958	Pig	Antimonial Lead Content	Total	Pig	Antimonial Lead Content	Total	Pig	Antimonial Lead Content	Total
Total ..	1,485,282	106,383	1,591,665	1,307,390	102,697	1,410,087	.....	.....	.....
1959									
Jan. ..	129,604	9,755	139,359	114,038	10,014	124,052	328,719	20,974	349,693
Feb. ..	114,528	8,944	123,472	90,915	9,094	100,009	347,455	20,824	368,279
Mar. ..	123,549	8,747	132,296	118,050	9,403	127,453	362,493	20,168	382,661
Apr. ..	127,995	10,398	138,393	146,409	10,345	156,754	334,178	20,221	354,399
May ..	130,046	10,216	140,262	144,988	8,566	153,554	310,042	21,871	331,913
June ..	130,142	10,960	141,102	146,505	12,894	159,399	285,489	19,938	305,427
July ..	113,394	8,721	122,115	97,008	7,879	104,887	300,674	20,780	321,454
Aug. ..	105,433	7,094	112,527	114,715	11,517	126,232	290,832	16,357	307,189
Sept. ..	98,966	4,751	103,717	101,415	5,154	106,569	288,383	15,954	304,337
Oct. ..	101,159	8,583	109,742	112,940	8,808	121,748	276,602	15,729	292,331
U. S. A.									
1958									
Total ..	473,208	46,985	520,193	589,528	49,893	639,421	.....	.....	.....
1959									
Jan. ..	40,110	3,365	43,475	48,311	4,492	52,803	244,870	12,426	257,296
Feb. ..	35,084	4,145	39,229	40,881	4,073	44,954	254,229	12,961	267,190
Mar. ..	35,140	3,868	39,008	49,742	4,279	54,021	248,166	12,744	260,910
Apr. ..	35,072	5,167	40,239	60,312	5,072	65,384	234,187	13,578	247,765
May ..	34,483	4,359	38,842	78,398	4,598	82,996	209,558	13,950	223,508
June ..	31,786	5,296	37,082	75,563	7,122	82,685	177,603	12,424	190,027
July ..	30,098	2,646	32,744	31,991	2,153	34,144	187,526	13,082	200,608
Aug. ..	23,404	2,091	25,495	55,094	7,397	62,491	174,959	7,979	182,938
Sept. ..	14,699	88	14,787	37,310	543	37,853	163,467	7,727	171,194
Oct. ..	18,096	697	18,793	35,110	2,290	37,400	167,969	8,150	176,119
Outside U. S. A.									
1958									
Total ..	1,012,074	59,398	1,071,472	717,862	52,804	710,666	.....	.....	.....
1959									
Jan ..	89,494	6,390	95,884	65,727	5,522	71,249	83,849	8,548	92,397
Feb. ..	79,444	4,799	84,243	50,034	5,021	55,055	93,226	7,863	101,089
Mar. ..	88,409	4,879	93,288	68,308	5,124	73,432	114,327	7,424	121,751
Apr. ..	92,923	5,231	98,154	86,097	5,273	91,370	99,991	6,643	106,634
May ..	95,563	5,857	101,420	66,590	3,968	70,558	100,484	7,921	108,405
June ..	98,356	5,664	104,020	70,942	5,772	76,714	107,886	7,514	115,400
July ..	83,296	6,075	89,391	65,017	5,726	70,743	113,148	7,698	120,846
Aug. ..	82,029	5,003	87,032	59,621	4,120	63,741	115,873	8,378	120,846
Sept. ..	84,267	4,663	88,930	64,105	4,611	68,716	124,916	8,227	133,143
Oct. ..	83,063	7,886	90,949	77,830	6,518	84,348	108,633	7,579	116,212

Summary of Lead Statistics for United States

Recoverable Lead Content In Tons of 2000 Pounds	Stocks (end of period)					Smelter Receipts			
	Raw Material at Smelter	Base Bullion — At Smelter & Transit	Base Bullion — At Refinery and Process	Refined Pig and Antimonial	Total	Primary Origin — U.S.A.	Primary Origin — Outside U.S.A.	Scrap	Total
1958									
November ..	60,222	3,573	30,208	230,080	324,083	23,603	15,932	3,869	43,404
December ..	68,197	4,489	28,955	252,466	354,107	25,544	18,921	4,090	43,555
Total	....	....	....	.....	.....	297,687	191,415	29,080	518,182
1959									
January ...	69,015	4,243	31,577	257,296	362,131	24,931	19,185	3,167	47,283
February ..	58,921	2,919	35,062	267,190	364,092	22,934	8,435	1,772	33,141
March	65,478	4,283	33,815	260,910	364,486	22,258	21,368	1,426	45,052
April	61,779	4,424	31,596	247,765	345,564	22,868	11,344	1,214	35,426
May	52,115	3,370	32,693	223,508	311,686	22,072	5,330	2,008	29,410
June	55,472	7,454	27,020	190,027	279,973	24,610	12,690	2,444	39,744
July	51,091	7,009	31,461	200,608	290,169	20,029	11,799	2,065	33,893
August	49,262	9,637	24,994	182,938	266 831	20,958	2,703	1,428	25,089
September .	61,420	9,609	29,012	171,194	271,235	13,725	11,675	753	26,153
October ...	66,942	7,285	24,758	176,119	275,194	15,837	4,959	1,049	21,845

1958	Smelter Production	Refined Productions — Pig	Refined Productions — Antimonial	Refined Productions — Total	Deliveries to U. S. Fabricators including imports from sources reporting to ABMS — Pig	Deliveries to U. S. Fabricators including imports from sources reporting to ABMS — Antimonial	Deliveries to U. S. Fabricators including imports from sources reporting to ABMS — Total
November	41,365	36,572	3,621	40,193	44,834	4,181	49,015
December	39,972	39,504	4,307	43,811	31,869	3,737	35,606
Total	512,323	473,208	46,985	520,193	589,528	49,893	639,421
1959							
January	45,938	40,110	3,365	43,475	48,311	4,492	52,803
February	40,655	35,084	4,145	39,229	40,881	4,073	44,954
March	38,138	35,140	3,868	39,008	49,742	4,279	54,021
April	38,614	35,072	5,167	40,239	60,312	5,072	65,384
May	38,722	34,483	4,359	38,842	78,398	4,598	82,996
June	35,807	31,786	5,296	37,082	75,563	7,122	82,685
July	37,328	30,098	2,646	32,744	31,991	2,153	34,144
August	26,698	23,404	2,091	25,495	55 094	7,397	62,491
September	13,995	14,699	88	14,787	37,310	543	37,853
October	16,315	18,096	697	18,793	35,110	2,290	37,400

United States Lead Statistics of Primary Refineries

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

	Stock At Beginning	Production Primary & Secondary	Total Supply	Stock At End	Domestic Shipments
1954	81,152	551,618	632,770	92,719	475,551
1955	28,855	547,153	639,872	31,089	531,339
1956	.....	613,293	644,382	.....	529,484
1957	.....	604,353	645,534	.....	463,060
1958					
January	91,598	47,665	139,263	101,206	33,422
February	101,206	47,133	148,339	119,522	23,832
March	119,522	43,441	162,963	128,754	28,885
April	128,754	40,984	169,738	143,136	22,172
May	143,136	47,487	190,623	155,121	30,021
June	155,121	44,636	199,757	163,504	32,078
July	163,504	38,827	202,331	164,860	31,948
August	164,860	39,520	204,380	169,302	34,254
September	169,302	43,269	212,571	170,666	41,657
October	170,666	45,467	216,133	169,435	46,647
November	169,435	40,485	209,920	179,321	30,591
December	179,321	44,042	223,363	198,538	24,852
Total	....	522,956	614,554	....	380,359
1959					
January	198,508	43,652	242,160	208,874	33,035
February	208,874	39,498	248,372	214,946	30,685
March	214,946	39,238	254,184	210,524	40,980
April	210,524	40,606	251,130	197,823	52,469
May	197,823	39,101	236,924	171,577	65,207
June	171,577	37,459	209,036	133,235	75,465
July	133,235	32,882	166,117	142,694	22,380
August	142,694	25,589	168,283	124,259	43,850
September	124,259	14,801	139,060	117,296	21,795
October	117,296	18,892	136,188	115,418	20,552

In instances where the figures are not in balance it is due to shipments to other than domestic consumers.

Industrial Classification of Domestic Lead Shipments

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

	Cable	Amm.	Foil	Batt'y	Brass Making	Sundries	Jobbers	Unclassified
1955								
Total	72,418	27,599	2,622	88,461	3,960	52,994	13,084	270,251
1956								
Total	80,360	24,501	1,435	70,614	3,158	56,851	13,213	274,716
1957								
Mar.	5,956	752	...	6,479	686	4,614	1,064	18,674
April	6,731	2,250	....	6,242	909	2,958	1,040	17,453
May	6,976	2,200	120	4,705	270	3,871	634	16,558
June	3,726	2,250	75	3,762	666	5,071	1,087	20,620
July	5,249	1,650	105	5,332	566	5,310	1,110	19,260
Aug.	5,406	2,250	220	6,165	650	6,246	1,403	27,066
Sept.	4,880	2,700	295	6,722	850	5,782	891	29,739
Oct.	3,671	3,300	205	5,973	881	4,203	847	21,367
Nov.	2,950	2,500	85	3,126	493	3,800	706	18,533
Dec.	2,499	1,350	36	2,820	270	2,607	529	13,997
Total	58,444	25,452	1,691	64,761	7,420	53,284	11,127	240,881
1958								
Jan.	2,938	550	70	4,775	521	5,173	801	18,594
Feb.	2,899	1,750	70	5,124	90	1,643	888	11,368
Mar.	3,133	1,200	35	4,711	681	3,149	908	15,068
April	3,207	900	70	3,138	580	2,831	533	10,913
May	3,216	1,850	35	4,671	866	3,071	1,027	15,285
June	3,463	1,950	35	2,767	480	4,217	1,716	17,450
July	3,169	1,250	275	3,936	515	4,157	1,052	17,594
Aug.	3,481	2,415	70	4,992	400	6,399	100	16,397
Sept.	4,132	2,290	320	5,775	848	6,771	1,747	19,774
Oct.	3,243	2,450	...	4,548	285	6,210	1,641	28,270
Nov.	3,690	2,150	50	6,527	360	4,887	822	12,105
Dec.	2,267	2,100	50	6,216	215	2,578	652	10,774
Total	38,838	20,855	1,080	57,180	5,841	51,086	11,882	193,592
1959								
Jan.	2,284	2,100	100	5,594	161	3,545	727	18,524
Feb.	2,988	1,225	50	5,254	735	2,706	931	16,796
Mar.	3,156	1,850	105	5,905	378	6,006	2,185	21,395
April	3,686	2,150	35	7,410	691	5,356	1,966	31,355
May	4,054	2,900	35	6,870	475	7,990	2,843	40,040
June	5,272	3,210	70	12,515	180	8,009	3,663	42,546
July	850	295	70	2,570	315	3,166	997	14,117
Aug.	3,268	1,150	205	3,073	410	6,640	1,921	27,183
Sept.	1,003	....	35	3,401	255	2,296	1,484	13,321
Oct.	700	500	35	4,299	228	2,676	1,021	11,093

Lead Prices at New York

(Common Grade)
Monthly Average Prices
(Cents per pound)

	1956	1957	1958	1959
Jan.	16.16	16.00	13.00	12.619
Feb.	16.00	16.00	13.00	11.583
Mar.	16.00	16.00	13.00	11.42
Apr.	16.00	16.00	12.00	11.20
May	16.00	15.385	11.712	11.905
June	16.00	14.32	11.24	12.00
July	16.00	14.00	11.00	12.00
Aug.	16.00	14.00	10.85	12.286
Sept.	16.00	14.00	10.89	13.00
Oct.	16.00	13.704	12.673	13.00
Nov.	16.00	13.50	13.00	13.00
Dec.	16.00	13.00	13.00	....
Aver.	16.013	14.66	12.114	....

Lead Sheet Prices

(To Jobbers, Full Sheets)
Monthly Average Prices)
(Cents per pound)

	1956	1957	1958	1959
Jan.	21.66	21.50	18.50	18.119
Feb.	21.50	21.50	18.50	17.083
Mar.	21.50	21.50	18.50	16.92
Apr.	21.50	21.50	17.50	16.70
May	21.50	20.885	17.212	17.405
June	21.50	19.82	16.74	17.50
July	21.50	19.82	16.50	17.50
Aug.	21.50	19.50	16.35	17.786
Sept.	21.50	19.50	16.39	18.50
Oct.	21.50	19.204	18.173	18.50
Nov.	21.50	19.00	18.50	18.50
Dec.	21.50	18.50	18.50	....

Battery Shipments

The following table shows replacement battery shipments in the United States as compiled by the Business Information Division of Dun & Bradstreet, Inc., for the Association of American Battery Manufacturers:

(In thousands of units)

	1956	1957	1958	1959
Jan.	2,058	2,638	2,004	2,672
Feb.	1,340	1,961	1,803	1,791
Mar.	1,348	1,254	1,577	1,376
Apr.	1,368	1,178	1,242	1,439
May	1,761	1,605	1,454	1,593
June	1,807	1,878	1,773	2,116
July	2,178	2,469	2,101	2,566
Aug.	2,571	2,856	2,333	2,728
Sept.	2,711	2,688	2,704	2,889
Oct.	3,015	3,042	2,976	3,068
Nov.	2,592	2,359	2,262	....
Dec.	2,265	2,015	3,036	....
Total	25,014	25,943	25,265	....

Lead Stocks at Primary U. S. Smelters and Refiners

(American Bureau of Metal Statistics)
(In tons of 2,000 lbs.)

	In ore and matte and in process at smelteries	—In base bullion (lead content)— At smelteries & refineries	In transit to refineries	In process at refineries	Refined pig lead	Anti-monial lead	Total Stocks
1957							
Sept. 1.	84,205	13,029	2,667	22,439	51,080	9,553	182,973
Oct. 1..	80,662	11,905	3,175	20,351	44,467	10,215	170,775
Nov. 1..	76,230	14,220	2,538	18,695	47,460	11,581	170,724
Dec. 1..	65,341	11,646	3,547	21,867	59,755	11,119	173,275
1958							
Jan. 1..	79,362	11,019	2,779	23,154	79,741	11,857	207,912
Feb. 1..	79,738	11,510	3,678	24,535	88,517	12,689	220,667
Mar. 1..	79,588	9,546	3,670	22,834	107,213	12,309	235,250
Apr. 1..	83,185	10,692	2,187	21,766	116,610	12,144	246,584
May 1..	86,053	11,838	2,138	20,524	130,668	12,468	263,689
June 1..	79,482	11,059	2,010	20,188	141,967	13,154	267,860
July 1..	80,060	9,012	1,570	22,092	150,648	12,856	276,238
Aug. 1..	83,347	12,438	860	21,615	154,378	10,482	283,379
Sept. 1.	77,416	14,767	1,176	20,444	158,413	10,889	283,105
Oct. 1..	72,724	14,797	2,223	18,125	159,662	11,004	278,535
Nov. 1..	61,819	11,492	1,086	19,041	157,385	12,050	262,873
Dec. 1..	62,960	11,072	1,565	20,941	167,493	11,828	275,859
1959							
Jan. 1..	72,378	10,917	1,767	19,746	185,913	12,595	303,316
Feb. 1..	72,832	10,565	1,889	21,317	197,085	11,789	315,477
Mar. 1..	62,383	11,707	1,447	21,479	202,835	12,111	311,962
Apr. 1..	68,433	14,352	350	20,575	198,459	12,065	314,234
May 1..	64,538	12,373	624	20,507	184,468	13,355	295,865
June 1..	55,223	12,239	766	20,391	157,981	13,596	260,196
July 1..	58,451	13,270	943	19,468	120,914	12,321	225,367
Aug. 1..	53,115	18,379	158	18,021	129,551	13,143	232,367
Sept. 1.	50,007	17,389	....	15,638	116,344	7,915	207,293
Oct. 1..	61,910	17,925	....	14,932	109,527	7,769	212,063
Nov. 1..	69,429	14,800	...	14,919	107,849	7,569	214,566

Receipts of Lead in Ore and Scrap

By U. S. Smelters (a)

(American Bureau of Metal Statistics) (In tons of 2,000 lbs.)

	——Receipts of lead in ore—— United States	Foreign	Total	Receipts of lead in scrap etc. (b)	Total receipts in ore, & scrap
1953 Total	351,183	155,788	506,971	42,994	549,965
1954 Total	336,291	158,081	494,372	49,864	544,236
1955 Total	341,595	172,966	514,561	42,996	557,557
1956					
Total	368,499	192,318	560,817	55,925	616,792
1957					
September	26,479	13,757	40,236	4,375	44,611
October	29,342	13,782	43,124	4,386	47,510
November	25,809	17,251	43,060	3,258	46,318
December	27,105	26,610	53,715	3,791	57,506
Total	356,409	206,901	563,310	42,537	605,847
1958					
January	25,537	22,097	47,634	3,507	51,141
February	23,789	16,400	40,189	2,184	42,373
March	21,735	20,038	41,773	3,154	44,927
April	25,104	15,821	40,925	1,913	42,838
May	27,427	10,228	37,655	1,867	39,522
June	28,577	13,811	42,388	1,366	43,754
July	22,289	19,692	41,891	1,615	43,596
August	22,984	13,043	36,027	1,252	37,279
September	20,654	14,576	35,230	1,765	36,995
October	18,678	9,093	27,771	3,577	31,348
November	24,024	14,541	38,565	3,933	42,498
December	24,366	18,804	43,170	3,982	47,152
Total	285,164	188,144	473,308	30,115	503,423
1959					
January	24,304	19,449	43,753	3,138	46,891
February	22,253	8,660	30,913	1,747	32,660
March	21,897	21,012	42,909	1,328	44,237
April	22,339	10,998	33,337	1,196	34,533
May	21,645	5,202	26,847	1,930	28,777
June	23,634	12,368	36,002	2,431	38,433
July	19,165	11,695	30,860	2,199	33,059
August	19,971	2,821	22,792	1,009	23,801
September	13,591	3,465	17,056	32	17,088
October	14,740	3,648	18,388	133	18,521

(a) Receipts of lead in ore are computed on the basis of recoverable lead. Owing to the estimational factor in this, which is probably on the low side, and also to the possibility that some lead receipts may escape attention, these monthly totals probably underrun the actual production of pig lead. (b) inclusive only of scrap smelted in connection with ore, plus some scrap received by primary refiners.

N. Y. Lead Price Changes

(Effective Date)

1951		Apr. 12	14.00
Oct. 2	**19.00	June 2	14.25
1952		June 15	14.00
Apr. 29	18.00	Aug. 25	14.25
May 2	17.00	Sept. 7	14.50
May 12	15.00	Sept. 15	14.75
June 23	15.50	Oct. 4	14.875
June 24	16.00	Oct. 5	15.00
Oct. 7	15.00	1955	
Oct. 14	14.00	Sept. 23	15.00-15.50
Oct. 22	13.50	Sept. 26	15.50
Nov. 3	14.00	Dec. 29	16.00
Nov. 10	14.20	1956	
Nov. 11	14.50	Jan. 4	16.50
Nov. 20	14.25	Jan. 13	16.00
Nov. 24	14.00	1957	
Dec. 22	14.25	May 9	15.50
Dec. 29	14.50	May 16	15.00
Dec. 31	14.75	June 11	14.00
1953		Oct. 14	13.50
Jan. 7	14.50	Dec. 2	13.00
Jan. 12	14.00	1958	
Feb. 2	13.50	Apr. 1	12.00
Mar. 4	13.50	May 14	11.50
Mar. 10	13.50	June 3	11.00
Apr. 7	13.00	June 18	11.50
Apr. 16	12.50	July 1	11.00
Apr. 21	12.00	Aug. 13	10.75
Apr. 29	12.50	Sept. 17	11.00
May 18	12.75	Sept. 30	11.50
May 19	13.00	Oct. 2	12.00
May 26	13.15	Oct. 8	12.50
June 11	13.50	Oct. 14	13.00
July 20	13.75	1959	
July 23	14.00	Jan. 21	12.00
Sept. 16	13.50	Feb. 11	11.50
1954		Feb. 24	11.00
Jan. 18	13.00	Mar. 5	11.50
Feb. 18	12.50	April 1	11.00
Mar. 9	12.75	April 20	11.50
Mar. 10	13.00	May 7	12.00
Mar. 26	13.25	Aug. 24	13.00
Mar. 29	13.50	Dec. 14	12.50
Apr. 1	13.75	Dec. 21	12.00

**OPS Ceiling.

Antimonial Lead Stocks at Primary Refineries

(A.B.M.S.)

(In tons of 2,000 pounds)

End of	1956	1957	1958	1959
Jan.	8,389	10,487	12,689	11,789
Feb.	9,095	10,220	12,309	12,111
Mar.	10,289	9,794	12,144	12,065
Apr.	10,690	9,391	12,468	13,355
May	10,902	9,799	13,154	13,596
June	9,452	9,503	12,856	12,321
July	10,924	8,661	10,482	13,143
Aug.	10,074	9,553	10,889	7,915
Sept.	11,181	10,215	11,004	7,769
Oct.	11,382	11,581	12,050	7,569
Nov.	11,832	11,119	11,828	....
Dec.	11,746	11,857	12,595	....

Antimonial Lead Production by Primary Refineries

(A.B.M.S.)

(In tons of 2,000 pounds)

End of	1956	1957	1958	1959
Jan.	5,045	5,113	3,743	3,541
Feb.	5,888	5,468	3,657	4,415
Mar.	5,526	5,091	3,527	4,098
Apr.	5,818	6,183	3,655	5,533
May	5,405	6,978	4,827	4,618
June	4,456	4,466	3,992	5,671
July	3,853	5,372	2,775	2,784
Aug.	5,343	7,967	5,244	2,185
Sept.	6,709	7,574	4,761	102
Oct.	5,378	6,148	5,849	886
Nov.	6,993	3,791	3,913	....
Dec.	5,766	3,290	4,539	....
Total	66,180	67,541	50,482	....

Lead Imports and Exports By Principal Countries

(A.B.M.S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

	1959		
	July	Aug.	Sept.
IMPORTS			
U. S.* (s.t.)	23,404	19,074	16,623
Canada (s.t.)	1	...	...
Belgium	1,132	..	...
Denmark	1,046	1,657	2,065
France	3,568	3,853	4,020
Germany, West**	6,267	...	...
Italy††	688	945	...
Netherlands	2,931	2,372	...
Norway	188	...	...
Sweden	282	733	...
Switzerland	1,191	1,189	1,391
U. K. (l.t.)	26,001	9,364	11,829
India† (l.t.)	3,308	711	...
EXPORTS			
U. S.* (s.t.)	193	1,418	19
Canada	3,478	4,024	3,895
Belgium	5,432	...	...
Denmark	682	613	713
France	684	26	117
Germany, West**	1,388	...	...
Netherlands	493	258	...
Sweden	1,586	3,186	...
Northern Rhodesia† (l.t.)	1,902	1,927	981
Australia (l.t.)	9,653	9,235	9,721

* Refined.
** Includes scrap.
†† Includes lead alloys.
† British Bureau of Non-Ferrous Metal Statistics.

French Lead Imports

(A.B.M.S.)

(In metric tons)

	1959		
	Aug.	Sept.	Oct.
Ore (gross weight)	8,118	5,781	10,152
Morocco	7,107	5,731	8,652
Fr. Eq. Africa	1,000	...	1,500
Madagascar	11	...	...
Pig lead	3,853	4,020	5,070
Belgium	504	1,042	1,048
Germany (W.)	...	201	...
Spain	160	...	...
Algeria	14	6	...
Morocco	1,756	1,365	2,611
Tunisia	1,394	1,126	1,411
Australia	...	280	...
Other countries	25	..	...
Antimonial lead	47	31	16

U. K. Lead Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1959		
	Aug.	Sept.	Oct.
(Gross Weight)			
Lead and lead alloys	9,364	11,829	10,903
Australia	4,115	10,022	7,518
Canada	3,485	1,278	2,590
Peru	100	...	100
Other countries	1,664	529	695

IT PAYS
to
ADVERTISE
in the
DAILY METAL REPORTER

U. S. Lead Consumption

(Bureau of Mines — In Short Tons)

	1959		
Metal Products	Jan.-Sept. totals	Aug.	Sept.
Ammunition	33,780	3,437	4,130
Bearing metals	16,982	1,797	1,956
Brass and bronze	18,195	1,887	2,016
Cable covering	46,150	4,446	5,027
Calking lead	59,736	7,107	6,690
Casting metals	5,645	645	593
Collapsible tubes	6,556	677	856
Foil	2,843	414	252
Pipes, traps and bends	17,090	1,726	1,928
Sheet lead	20,833	2,260	1,954
Solder	52,050	6,193	5,948
Storage battery grids, posts, etc.	134,275	16,546	15,654
Storage battery oxides	132,524	15,671	16,207
Terne metal	3,155	119	55
Type metal	19,675	2,014	2,042
Total	**567,689**	**64,939**	**65,308**
Pigments:			
White lead	9,474	419	1,029
Red lead and litharge	61,005	7,490	6,738
Pigment colors	10,057	1,235	1,221
Other*	3,281	358	370
Total	**83,817**	**9,502**	**9,358**
Chemicals:			
Tetraethyl lead	120,413	11,379	14,108
Misc. chemicals	2,768	347	500
Total	**123,181**	**11,726**	**14,608**
Miscellaneous uses:			
Annealing	3,197	160	138
Galvanizing	748	22	13
Lead plating	144	15	9
Weights and ballast	5,361	530	904
Total	**9,450**	**727**	**1,556**
Other uses unclassified	**12,297**	**1,157**	**1,556**
Total reported†	**796,434**	**88,051**	**91,894**
Estimated unreported consumption	18,000	2,000	2,000
Grand total†	**814,400**	**90,000**	**93,900**
Daily average‡	**2,983**	**2,904**	**3,130**

* Includes lead content of leaded zinc oxide production.
† Includes lead content of scrap used directly in fabricated products.
‡ Based on number of days in month without adjustment for Sundays and holidays.

U. K. Lead Consumption

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 pounds)

	1957	1958	1959
Jan.	29,657	29,607	28,872
Feb.	29,219	27,855	25,968
Mar.	29,144	29,713	26,691
Apr.	27,246	26,230	29,252
May	31,574	28,839	27,280
June	28,607	28,624	30,099
July	27,604	27,201	26,851
Aug.	24,756	21,726	25,358
Sept.	29,519	28,829	30,255
Oct.	32,486	31,356	32,926
Nov.	31,060	28,786	....
Dec.	26,530	27,154	....
Total	**347,699**	**335,920**	....

American Antimony

Monthly Average Prices
In bulk, f.o.b. Laredo
(Cents per lb. in ton lots)

	1956	1957	1958	1959
Jan.	33.00	33.00	33.00	29.00
Feb.	33.00	33.00	30.818	29.00
Mar.	33.00	33.00	29.00	29.00
Apr.	33.00	33.00	29.00	29.00
May	33.00	33.00	29.00	29.00
June	33.00	33.00	29.00	29.00
July	33.00	33.00	29.00	29.00
Aug.	33.00	33.00	29.00	29.00
Sept.	33.00	33.00	29.00	29.00
Oct.	33.00	33.00	29.00	29.00
Nov.	33.00	33.00	29.00	29.00
Dec.	33.00	33.00	29.00	....
Aver.	**33.00**	**33.00**	**29.485**	....

Consumers' Lead Stocks, Receipts and Consumption

(Bureau of Mines — In Short Tons)

	Stocks Aug. 31, 1959	Net Receipts in Sept.	Consumed in Sept.	Stocks Sept. 30 1959
Soft lead	111,237	52,971	62,167	102,041
Antimonial lead	36,335	22,306	21,723	36,918
Lead in alloys	7,345	2,982	3,118	7,209
Lead in copper-base scrap	1,100	1,601	1,561	1,140
Total	156,017	79,860	*88,569	147,308

* Excludes 2,991 tons of lead which went directly from scrap to fabricated products and 334 tons of lead contained in leaded zinc oxide production.

Consumption of Lead by Class of Product

(Bureau of Mines — In Short Tons)

SEPTEMBER

	Soft lead	Antimonial lead	Lead in alloys	Lead in copper-base scrap	Total
Metal products	36,582	21,124	3,094	1,561	62,361
Pigments	9,003	21	....	....	9,024
Chemicals	14,608	....	....	....	14,608
Miscellaneous	541	523	....	....	1,064
Unclassified	1,433	55	24	....	1,512
Total	62,167	21,723	3,118	1,561	*88,569

* Excludes 2,991 tons of lead which went directly from scrap to fabricated products and 334 tons of lead contained in leaded zinc oxide production.

Domestic Zinc Statistics

American Zinc Institute

Commencing with January, 1948, all regularly operating U. S. primary and secondary smelters are included in this report. Production from foreign ores also is included.

(Tons of 2,000 lbs.)

	Stock Beginning	Production	Shipments: Domestic	Export & Drawback	Gov't Acc't	Total	Stock at End	Daily Avg. Prod.
1950 Tl.	94,221	910,354	849,246	18,189	128,256	995,691	8,884	2,494
1950 Mo. Avg.		75,863	70,770	1,516	10,688	82,974		
1951 Total	8,884	931,833	836,800	42,067	39,945	918,816	21,901	2,553
1951 Mo. Avg.		77,653	69,733	3,506	3,329	76,568		
1952 Total	21,901	961,430	803,343	56,202	36,626	896,171	87,160	2,627
1952 Mo. Avg.		80,119	66,945	4,683	3,052	74,681		
1953 Total	87,160	971,191	818,850	16,326	42,332	877,508	180,843	2,661
1953 Mo. Avg.		80,933	68,238	1,361	3,528	73,126		
1954 Total	180,843	868,242	787,922	27,929	108,957	924,808	124,277	2,379
1954 Mo. Avg.		72,353	65,660	2,327	9,080	77,067		
1955 Total	40,979	1,031,018	1,007,619	19,497	87,200	1,114,316	40,979	2,825
1955 Mo. Avg.		85,918	83,968	1,625	7,267	92,860		
1956 Total		1,062,954	869,270	9,027	157,014	1,035,311	68,622	2,904
1956 Mo. Avg.		88,850	72,439	752	13,085	86,275		
1957								
September	149,296	77,455	62,111	530	10,344	72,985	153,766	2,582
October	153,766	81,492	66,225	372	12,736	79,333	155,925	2,629
November	155,925	79,754	73,437	581	9,148	83,166	152,531	2,658
December	152,531	86,270	62,730	210	9,188	72,128	166,655	2,783
1957 Total		1,067,450	765,132	15,460	179,466	815,567		
1958								
January	166,655	82,343	58,211	641	9,805	68,657	180,346	2,656
February	180,346	68,354	49,072	446	9,993	59,511	189,189	2,441
March	189,189	72,274	48,948	111	8,763	57,822	203,641	2,331
April	203,641	70,214	46,598	159	5,927	52,684	221,171	2,340
May	221,171	71,018	51,390	129	....	51,519	240,670	2,291
June	240,670	66,967	54,487	171	....	54,658	252,979	2,232
July	252,979	65,119	60,312	55	....	60,187	257,911	2,101
August	257,911	62,927	68,718	591	....	69,309	251,529	2,030
September	251,529	63,705	76,905	213	....	77,118	238,116	2,124
October	238,116	65,304	93,018	226	....	93,224	210,176	2,107
November	210,176	65,174	83,394	212	....	83,606	191,744	2,172
December	191,744	75,503	76,862	148	....	77,010	190,237	2,432
1958 Total		828,902	767,755	3,102	34,488	805,325	....	....
1959								
January	190,237	76,481	70,770	171	....	70,941	195,777	2,467
February	195,777	71,174	65,641	849	....	66,490	200,461	2,542
March	200,461	79,918	73,814	482	....	74,296	206,083	2,578
April	206,083	76,393	78,358	255	....	78,613	203,863	2,546
May	203,863	77,489	85,073	275	....	85,348	196,004	2,500
June	196,004	75,544	99,858*	204	2,100	102,162	169,386	2,518
July	169,386	73,101	59,460	94	900	60,454	182,033	2,358
August	182,033	69,768	58,918	864	....	59,782	192,019	2,251
September	192,019	62,202	57,971	3,214	....	61,185	193,036	2,073
October	193,036	63,938	63,910	1,813	....	65,723	191,251	2,063
November	191,251	62,346	74,596	2,844	....	77,440	176,157	2,078

* Inflated by abnormal shipments on consignment of approximately 9,000 tons.

U. S. Consumption of Slab Zinc

Bureau of Mines

By Industries (Short Tons)

	Galvanizers	Die Casters	Brass products	Rolled zinc	Zinc oxide & other	Total
1950 Total	434,094	281,385	136,451	67,779	27,656	947,365
1951 Total	386,373	266,442	141,456	64,000	28,738	887,009
1952 Total	375,563	236,022	155,311	51,508	30,885	849,289
1953 Total	403,162	305,346	177,301	53 784	38,037	977,636
1954 Total	398,599	286,817	107,293	45,979	33,342	876,130
1955 Total	439,694	404,790	144,816	50,363	39,302	1,081,468
1956 Total	421,218	352,451	122,395	45,382	36,251	983,097
1957						
August	27,885	29,237	9,755	3,686	3,099	74,562
September	28,651	31,051	9,588	2,911	1,590	75,976
October	32,940	35,499	10,952	3,385	1,783	87,898
November	28,025	31,396	10,024	2,843	1,255	76,595
December	24,383	27,927	7,854	2,679	1,427	67,421
Total	355,796	358,543	111,114	39,544	20,486	924,063
1958						
January	26,861	26,348	9,115	3,183	1,664	69,295
February	24,598	22,629	7,279	2,716	1,316	60,347
March	27,171	19,045	6,871	3,138	1,724	59,978
April	27,464	17,829	6,392	3,259	1,295	58,432
May	30,935	18,316	6,597	2,896	2,263	61,907
June	34,377	21,497	6,643	2,961	2,212	67,690
July	30,677	17,387	6,275	2,848	1,920	60,007
August	34,663	20,382	8,358	3,379	1,901	70,033
September	34,048	25,188	9,624	3,458	770	74,122
October	36,513	27,682	11,753	3,845	881	81,919
November	31,658	27.311	10,067	3,276	826	74,302
December	31,746	29,926	10,529	3,681	1,018	78,082
Total	370,441	273,540	92,906	38,690	16,772	737,942
1959						
January	31,729	29,110	11,172	3,874	2,521	79,506
February	31,672	26,448	11,508	3,418	2,864	77,010
March	37,287	29,286	12,889	3,629	3,203	87,394
April	38,541	31,262	12,304	3,715	3,223	90,145
May	38,788	29,169	12,015	3,316	3,305	88,093
June	40,531	36,269	10,764	3,801	3,120	95,985
July	23,700	28,120	7,558	2,509	2,042	65,429
August	13,763	29.803	10.064	3.160	2.161	60.451
September	13,181	31,463	10,842	3,322	2,237	62,545

Prime Western Zinc Prices

(East St. Louis, f.o.b.)

(Cents per pound)

(In tons of 2,240 pounds)

	1956	1957	1958	1959
Jan.	13.46	13.50	10.00	11.50
Feb.	13.50	13.50	10.00	11.411
Mar.	13.50	13.50	10.00	11.00
Apr.	13.50	13.50	10.00	11.00
May	13.50	11.933	10.00	11.00
June	13.50	10.84	10.00	11.00
July	13.50	10.00	10.00	11.00
Aug	13.50	10.00	10.00	11.00
Sept.	13.50	10.00	10.00	11.381
Oct.	13.50	10.00	10.865	12.233
Nov.	13.50	10.00	11.386	12.50
Dec.	13.50	10.00	11.50	....
Aver.	13.497	11.40	10.313	....

High Grade Zinc Prices

(Delivered)

N. Y. Monthly Averages

(Cents per pound)

	1956	1957	1958	1959
Jan.	14.81	14.85	11.35	12.50
Feb.	14.85	14.85	11.35	12.411
Mar.	14.85	14.85	11.35	12.00
Apr.	14.85	14.85	11.084	12.00
May	14.85	13.283	11.00	12.00
June	14.85	12.19	11.00	12.00
July	14.85	11.35	11.00	12.00
Aug.	14.85	11.35	11.00	12.006
Sept.	14.85	11.35	11.00	12.625
Oct.	14.85	11.35	11.865	13.483
Nov.	14.85	11.35	12.386	13.75
Dec.	14.85	11.35	12.50	....
Aver.	14.847	12.75	11.407	....

U. K. Zinc Consumption

(British Bureau of Non-Ferrous Metal Statistics)

(In Tons of 2,240 Pounds)

	1957	1958	1959
Jan.	28,485	27,473	27,849
Feb.	26,276	24,551	25,676
Mar.	27,049	26,967	27,243
Apr.	24,247	24,984	28,006
May	29,589	24,579	26,167
June	25,202	25,587	30,221
July	25,934	23,794	26,318
Aug.	20,381	19,076	21,566
Sept.	27,792	26,747	31,270
Oct.	29,552	29,838	30,686
Nov.	26,705	26,432	....
Dec.	24,419	26,042	....
Total	315,631	306,070	....

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DAILY METAL REPORTER

Mine Production of Zinc in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern States	Central States	Western States	Total U.S.*
1954				
Total	166,487	63,100	234,942	464,539
1955				
Total	163,230	73,630	277,811	514,671
1956				
Total	175,310	61,080	301,253	537,643
1957				
Total	196,877	29,506	290,151	520,128
1958				
Apr.	15,719	1,311	22,375	39,405
May	15,580	1,314	18,940	35,834
June	14,931	1,490	16,650	32,971
July	13,427	——	15,985	29,442
Aug.	15,760	——	13,627	29,387
Sept.	14,857	——	15,279	29,865
Oct.	16,197	——	16,074	32,271
Nov.	15,393	——	16,998	32,391
Dec.	15,064	——	16,939	32,003
Total	181,202	8,450	213,267	402,919
1959				
Jan.	16,319	——	19,117	35,436
Feb.	16,405	——	19,304	35,709
Mar.	17,602	——	18,822	36,424
Apr.	18,521	——	19,149	37,670
May	18,500	——	19,170	37,670
June	17,501	——	18,443	35,944
July	12,697	——	18,686	31,383
Aug.	13,810	140	16,641	30,591
Sept.	13,639	154	14,778	28,571
Oct.	15,368	200	15,030	30,598

*Includes Alaskan output in some months.

Mine Production of Lead in United States

(U. S. Bureau of Mines)

(In short tons)

	Eastern States	Central States	Western States	Total U.S.*
1953				
Ttl.	9,970	136,650	188,776	335,412
1954				
Ttl.	8,608	138,940	169,804	317,352
1955				
Ttl.	10,379	145,640	177,409	333,409
1956				
Ttl.	11,395	141,900	195,034	348,329
1957				
Ttl.	9,300	135,800	188,392	333,493
1958				
May	626	11,660	11,939	24,225
June	615	10,662	11,499	22,776
July	454	10,019	10,662	21,135
Aug.	447	8,859	9,512	18,818
Sept.	389	7,734	11,221	19,344
Oct.	517	9,290	11,467	21,274
Nov.	606	10,500	11,823	22,929
Dec.	565	9,600	11,699	21,865
Ttl.	6,816	119,070	140,033	265,920
1959				
Jan.	469	9,748	13,180	23,397
Feb.	501	8,457	12,392	21,578
Mar.	601	7,943	12,585	21,129
Apr.	454	8,103	12,635	21,192
May	413	7,253	12,427	20,093
June	458	8,185	12,727	21,370
July	369	8,190	10,980	19,539
Aug.	353	9,762	11,533	21,648
Sept.	510	9,698	10,165	20,373
Oct.	548	10,012	10,395	20,955

Mine Production of Gold in United States

(U. S. Bureau of Mines)

(In fine ounces)

	Eastern States	Western States	Alaska*	Total
1955				
Ttl.	2,026	1,634,625	247,535	1,884,186
1956				
Ttl.	1,998	1,607,930	204,300	1,814,228
1957				
Ttl.	2,174	1,556,450	210,000	1,768,624
1958				
May	203	124,490	557	125,520
June	182	122,277	8,484	130,943
July	38	116,775	29,735	146,528
Aug.	174	113,281	34,947	148,202
Sept.	156	128,613	38,960	167,459
Oct.	186	135,882	42,467	178,535
Nov.	—	——	——	——
Dec.	—	——	10,373	144,757
1959				
Jan.	—	——	1,003	145,077
Feb.	—	——	233	128,614
Mar.	—	——	106	135,192
Apr.	—	——	106	136,283
May	—	——	490	147,900
June	—	——	8,882	146,815
July	—	——	26,457	160,859
Aug.	—	——	33,113	136,775
Sept.	—	——	31,974	114,708
Oct.	—	——	36,626	116,643

* Alaska totals based on mint and smelter receipts.

Mine Production of Recoverable Silver in United States

(U. S. Bureau of Mines)

(In Fine Ounces)

	Eastern States	Missouri	Western States	Alaska*	Total
1957 Total	610,386	240,000	37,018,950	26,000	37,895,336
1958					
August	8,819	19,970	2,836,937	5,968	2,417,095
September	5,783	17,180	2,621,537	3,392	2,646,193
October	5,653	20,600	2,749,976	5,338	2,781,560
November	†	16,000	†	3,175	2,720,577
December	†	13,730	†	675	2,682,299
Total	†	210,000	†	28,000	33,022,225
1959					
January	†	21,000	†	132	2,751,918
February	†	18,060	†	154	2,892,032
March	†	17,200	†	10	2,965,289
April	†	17,600	†	15	2,957,890
May	†	15,900	†	68	3,033,726
July	†	8,900	†	2,767	2,885,519
August	†	10,600	†	3,940	2,272,487
June	†	17,900	†	927	2,901,123
July	†	8,900	†	2,767	2,885,519
August	†	10,600	†	3,940	2,245,778
September	†	10,400	†	4,093	1,766,882
October	†	10,900	†	1,727	1,906,595

† Figures not available. * Alaska totals based on mint and smelter receipts.

U. S. Silver Production*

(A.B.M.S.)

(In thousands of ounces; commercial bars, 0.999 fine, and other refined forms)

	Dom.†	For.	Total
1954 Total	38,059	39,422	77,481
1955 Total	33,101	32,780	65,881
1956 Total	38,157	40,160	78,317
1957 Total	36,279	34,932	71,211
1958			
April	3,123	3,056	6,179
May	2,597	2,660	5,257
June	3,243	3,210	6,453
July	2,127	2,494	4,621
August	2,651	3,235	5,886
September	2,614	3,165	5,779
October	3,831	2,750	6,581
November	2,505	3,283	5,788
December	3,275	3,652	7,236
Total	35,691	37,572	73,263
1959			
January	2,330	4,460	6,790
February	2,827	2,913	5,740
March	2,823	4,087	6,910
April	2,946	3,233	6,179
May	2,641	3,484	6,125
June	3,219	3,231	6,450
July	2,609	3,284	5,893
August	1,472	1,229	2,701
September	390	577	967
October	510	610	1,120

* The separation between silver of foreign and domestic origin on the basis of refined bars and other refined forms is only approximate.

† Includes purchases of crude silver by the U. S. Mint.

Production of Primary Aluminum in the U. S.

(U. S. Bureau of Mines)

(In short tons)

	1952	1953	1954	1955	1956	1957	1958	1959
Jan.	76,934	89,895	116,247	128,203	140,394	147,029	139,910	156,708
Feb.	72,374	92,649	110,483	116,236	132,763	119,059	121,980	142,116
Mar.	77,069	104,460	122,339	130,272	145,895	135,706	134,019	157,189
Apr.	76,880	102,071	120,434	126,394	144,726	139,152	128,559	155,213
May	80,803	105,464	125,138	131,128	150,800	145,174	129,083	163,857
June	77,476	104,152	120,758	127,634	145,726	138,007	115,325	167,323
July	78,368	109,285	126,161	132,669	151,624	142,157	118,811	179,594
Aug.	85,175	110,545	125,296	133,551	92,406	143,449	125,416	172,817
Sept.	76,882	109,333	120,332	130,606	132,316	129,278	124,713	168,205
Oct.	77,312	108,219	125,089	134,655	149,125	133,759	139,847	173,762
Nov.	74,639	105,636	121,252	133,689	145,081	135,024	140,962	153,666
Dec.	83,419	110,291	127,056	140,748	148,391	140,033	153,301	....
Ttl.	937,330	1,252,013	1,460,565	1,565,721	1,679,427	1,647,710	1,565,556	....

Average Silver Prices

(Cents per fine ounce)

	1956	1957	1958	1959
Jan.	90.357	91.375	89.449	90.19
Feb.	90.90	91.375	88.625	90.444
Mar.	91.128	91.375	88.625	91.351
Apr.	90.875	91.375	88.625	91.375
May	90.75	91.307	88.625	91.375
June	90.46	90.456	88.625	91.375
July	90.14	90.31	88.625	91.375
Aug.	90.614	90.909	88.625	91.399
Sept.	90.75	90.602	88.673	91.399
Oct.	90.722	90.625	89.966	91.375
Nov.	91.375	90.382	90.125	91.375
Dec.	91.375	89.80	89.932	....
Aver.	90.79	90.824	89.043	....

Note — The averages are based on the price of refined bullion imported on or after August 31, 1943.

U. S. Lead Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	Aug.	Sept.	Oct.
Ore, matte, etc. (content)	5,952	16,436	6,141
Canada	2,400	3,801	1,378
Mexico	50	40	16
Honduras	222	554	264
Bolivia	993	1,118	440
Colombia	212	...	...
Peru	1,334	672	1,234
U. of S. Africa	...	6,844	405
Australia	548	3,387	2,276
Philippines	29	11	13
Other countries	164	9	115
Base bullion (content)	48	25	...
Canada	...	25	...
Peru	45	...	...
Other countries	3	...	...
Pigs and bars	19,074	16,623	18,762
Canada	2,882	3,208	1,112
Mexico	7,000	5,861	10,647
Peru	2,849	1,884	1,749
Belgium	...	1,223	...
France	...	...	215
Germany (W.)	...	165	...
Netherlands	...	..	50
Spain	...	1,120	369
United Kingdom	112	...	...
Yugoslavia	3,637	...	2,691
Australia	2,567	3,001	1,922
Other countries	27	161	7
Total Imports:			
Ore, base bullion, refined	25,074	33,084	24,903
Lead scrap, dross, etc. (cont.)	296	1,323	362
Antimonial lead & typemetal	100	200	449
Lead content thereof	77	164	351

U. S. Copper Exports

(In tons of 2,000 lbs.)

	1959		
	Aug.	Sept.	Oct.
Ore, conc. matte & other unref. (cont.)	...	6	...
Refined ingots, bars, etc.†	16,605	8,965	4,404
Canada	3	68	209
Mexico	...	...	27
Argentina	772	...	198
Brazil	355	180	...
Austria	20	...	...
Belgium	...	...	85
Denmark	336	...	...
France	4,175	416	368
Germany (W.)	3,555	5,430	1,597
Italy	2,851	677	485
Netherlands	1,229	336	114
Norway	...	224	...
Sweden	145	112	112
Switzerland	45	112	85
United Kingdom	1,855	705	530
Yugoslavia	...	569	569
Taiwan	10	10	...
India	592	67	...
Japan	322	55	24
Australia	336	...	...
Other countries	4	4	1
Total Exports:			
Crude & refined	16,605	8,971	4,404
Pipes and tubes	37	63	57
Plates and sheets	17	20	13
Semifabricated	444	562	630
Wire, bare	211	181	231
Building wire and cable‡	145	227	183
Weatherproof‡	5	5	2
Insulated copper wire n.e.s.‡	4,252	973	998

† Includes exports of refined coper resulting from scrap that was reprocessed on toll for account of the shipper.

‡ Gross weight; n.e.s.—not elsewhere specified.

U. S. Zinc Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	Aug.	Sept.	Oct.
Zinc Ore (content)	34,644	32,409	38,934
Canada	11,497	14,674	11,360
Mexico	18,149	10,682	17,577
Cuba	50	...	48
Guatemala	8	...	...
Honduras	182	53	68
Bolivia	...	113	33
Colombia	10	...	...
Peru	4,520	6,303	5,813
U. of S. Africa	...	27	3,697
Australia	222	475	291
Philippines	1	...	1
Other countries	5	82	46
Zinc blocks, pigs, etc.	9,116	13,273	16,839
Canada	5,980	6,444	9,436
Mexico	...	1,374	112
Peru	533	1,024	227
Belgium	45	1,653	112
Italy	110	20	1,260
United Kingdom	...	85	...
Yugoslavia	248	717	...
Belgian Congo	1,640	1,116	2,020
Rhodesia & Nyasaland	560	...	2,027
Australia	...	840	1,645
Total Imports:			
Zinc ore, blocks, pigs	43,760	45,682	55,773
Dross and skim.	166	44	114
Old and worn out	36	29	...

U. S. Zinc Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	Aug.	Sept.	Oct.
Slabs, blocks, etc.	214	3,024	1,354
Canada	...	1	...
Mexico	110	242	...
Cuba	...	...	55
Brazil	...	68	...
Chile	...	110	387
Belgium	...	1,791	...
Germany (W.)	...	56	...
Netherlands	...	112	...
Sweden	...	...	560
United Kingdom	84	644	196
Taiwan	10	...	...
Other countries	6	...	6
Colombia	4	...	150
Total Exports:			
Ore, conc. slabs, blocks	214	3,024	1,354
Scrap, ashes, dross and skimmings	2,135	2,413	1,219
Battery shells and parts, unassembled	...	25	13
Rolled in sheets, plates and strips and die castings	337	262	268
Zinc & zinc alloys in crude and semifabricated forms	95	26	137
Zinc oxide	258	177	76

Comparative Metal Prices

	Av. 1939	OPA Av. 1946	1959 Dec. 24
Copper, domestic Electro., Del. Val.	11.20	14.375	33.00*
Lead (N. Y.)	5.05	8.25	12.00
P. W. Zinc (E. St. Louis, f.o.b.)	5.05	5.05	12.50
New York, del.	...	...	13.00
Tin Spot Straits, N. Y.	...	...	99.00
Aluminum ingot 99½%+	20.00	15.00	38.10
Antimony (R.M.M. brand f.o.b. Laredo)	12.36	14.50	29.00

* Producers' prices.

U. S. Copper Imports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	Aug.	Sept.	Oct.
Ore, matte & regulus (cont.)	6,301	10,660	6,674
Canada	385	76	24
Mexico	185	43	...
Cuba	1,210	1,077	2,281
Argentina	...	...	5
Bolivia	38	...	286
Chile	...	2,453	1,055
Peru	301	1,495	1,483
Philippines	1,582	4,280	...
U. of S. Africa	...	1,192	1,540
Australia	2,598	44	...
Other countries	2	...	...
Blister copper (content)	18,837	25,019	17,791
Mexico	2,529	...	...
Chile	15,214	22,657	17,791
Peru	...	594	...
U. of S. Africa	...	1,667	...
Turkey	1,094	...	...
Other countries	...	101	...
Refined cathodes and shapes	12,935	40,284	19,833
Canada	7,131	13,253	12,939
Mexico	499	627	275
Chile	1,823	3,699	500
Peru	1,700	3,496	2,099
Belgium	...	2,614	189
Germany (W.)	...	5,751	1,120
Sweden	...	560	...
United Kingdom	2	6,181	1,851
Belgian Congo	1,500	...	...
Rhodesia & Nyasaland	280	4,019	831
Other countries	...	84	29
Total Imports:			
Crude & refined	38,073	75,963	44,298
Old and scrap (content)	242	474	508
Composition metal (content)	...	27	23
Brass scrap and old (cu. cont.)	134	265	141

U. S. Copper Scrap Exports

(A.B.M.S.) (Bureau of the Census)

(In tons of 2,000 lbs.)

	1959		
	Aug.	Sept.	Oct.
Copper scrap, unalloyed* (new and old)	283	773	419
Canada	...	41	15
Argentina	22	...	...
Germany (W.)	172	472	262
Netherlands	28	...	...
India	56	180	142
Japan	...	80	...
Other countries	5	...	...
Copper-base scrap, alloyed† (new and old)	1,823	1,941	1,136
Canada	3	...	...
Mexico	...	5	...
France	20	20	11
Germany (W.)	346	260	165
Italy	26	121	39
Netherlands	17	11	...
Switzerland	...	84	94
India	80	102	119
Japan	1,185	1,019	94
Hong Kong	145	309	614
Other countries	1	10	...

* Ash brass mill, clippings, dross, flue dust, residues, scale, skimmings, wire scrap.

† Copper-base alloys, including brass and bronze—Ashes, clippings for remanufacture, cupro-nickel scrap, cupro-nickel trimmings, nickel silver scrap, phosphor bronze, phosphor copper, skimmings, turnings, round.

World Production of Copper

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States (a)	Canada (b)	Mexico (crude) (c)	Chile (d)	Peru (d)	Fed. Rep. of Germany (e)	Norway (f)	United Kingdom (g-h)	Yugoslavia (c)	India (f-h)	Japan (e)	Turkey (f)	Australia (e)	Northern Rhodesia (e)	Union of South Africa (d)
1955															
Total	1,036,702	326,599	61,583	447,288	35,478	286,805	14,876	138,271	31,151	8,432	124,908	26,313	41,935	350,302	47,176
1956															
Total	1,133,134	356,251	69,918	506,251	35,005	279,461	16,457	127,365	32,390	8,827	139,062	27,101	55,711	435,186	47,914
1957															
Total	1,115,483	360,745	42,905	....	46,141	255,710	17,265	121,799	37,186	9,298	143,654	27,101	55,633	499,418	47,828
1958															
May	80,628	32,471	6,141	23,264	3,481	24,543	1,636	7,095	2,957	786	9,806	2,574	6,229	41,615	4,488
June	71,092	32,418	5,954	34,811	3,405	23,128	1,674	7,414	3,102	769	10,617	1,810	6,819	44,447	4,018
July	64,444	31,131	5,995	40,495	3,780	24,418	1,610	9,091	3,245	801	10,762	1,136	6,139	44,010	3,324
Aug.	67,917	50,867	6,340	45,211	3,646	26,409	1,855	3,451	2,838	786	11,053	....	6,220	42,000	4,974
Sept.	79,541	27,546	6,294	40,913	3,637	24,649	1,749	12,027	2,870	792	12,583	....	....	17,291	4,726
Oct.	92,214	22,572	5,380	47,230	2,950	27,635	1,618	11,225	3,616	809	13,310	....	....	....	4,749
Nov.	96,369	20,368	5,040	46,310	3,923	24,932	1,594	8,542	3,462	774	11,764	....	....	25,612	4,249
Dec.	97,641	19,023	5,066	46,284	3,196	25,569	1,597	9,042	2,929	832	15,054	....	....	45,935	4,406
Total	1,881,170	346,816	68,386	462,064	42,750	295,312	19,529	106,134	37,116	9,062	136,612	24,676	72,361	426,513	53,090
1959															
Jan.	95,542	24,669	5,342	44,579	3,115	25,945	1,724	7,356	3,685	679	17,385	2,469	5,349	48,699	4,600
Feb.	88,432	28,016	4,810	43,589	1,627	24,289	1,599	9,211	3,521	557	11,388	1,614	5,930	44,420	4,339
Mar.	101,410	32,427	4,771	44,554	1,601	26,959	1,694	8 654	3,536	810	10,746	2,034	4,573	51,630	4,611
April	98,376	32,130	5,201	42,715	4,250	26,859	1,870	11,259	3,593	763	17,938	2,330	7,419	48,150	4,528
May	104,236	32,622	5,275	46,083	3,770	25,358	1,771	7,693	3,503	764	18,516	2,480	6,408	53,067	4,676
June	99,419	36,979	5,847	46,901	3,357	24,635	1,743	10,909	3,231	776	18,621	2,362	8,133	53,895	4,766
July	81,662	36,067	5,755	45,508	3,676	25,890	1,639	7,108	3,369	781	18,957	1,846	5,346	46,806	....
Aug.	51,327	35,045	5,326	50,093	2,533	24,716	....	6,610	....	774	18,805	....	5,798	50,285	....
Sept.	19,503	35,740	4,125	44,439	3,782	25,357	....	10,438	....	799	18,837	....	7,111	48,753	....
Oct.	21,060	.....	4,066	.....	3,061	.....	.....	.....	.....	.....	.....	.....	.....	49,519	....

(a) Reported by Copper Institute. Crude, "recoverable contents of mine production or smelter production or shipments, and custom intake." Does not include intake of scrap nor of imported ore except that received from Cuba and Philippines. (b) Blister copper plus recoverable copper in concentrates, matte, etc., exported. (c) Crude copper, i. e., copper content of blister or converter copper as originally produced in the several countries, although some of it may be refined at home; e. g., in Rhodesia. (d) Blister and/or refined. (e) Refined. There are quantities of scrap included in the electrolytic production in addition to that reported, tonnage of which is not obtainable. (f) Smelter production. (g) Refinery production from imported blister only. (h) British Bureau of Non-Ferrous Metal Statistics. * Refined.

World Production of Refined Lead

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States	Canada	Mexico	Peru	Belgium	France	Fed. Rep. of Germany	Italy	Spain	Yugoslavia	Japan	Australia (a)	French Morocco	Tunisia	Rhodesia	Total
1955																
Total	547,153	148,811	221,138	67,303	91,241	73,251	162,508	46,806	67,509	83,347	40,912	254,558	28,870	28,620	17,976	1,893,125
1956																
Total	613,293	147,865	213,524	61,917	111,479	73,251	178,713	42,780	64,824	83,507	51,019	256,300	30,993	26,623	17,024	1,984,344
1957																
Total	604,533	142,935	218,266	55,971	....	94,509	195,136	42,336	61,332	85,313	59,670	261,035	34,442	27,069	12,364	2,041,530
1958																
May	47,487	12,212	21,005	5,421	9.058	8,339	16,327	2,402	6,944	7,482	3,541	25,035	3,532	2,978	1,204	174,255
June	44,636	12,706	17,846	6,255	8,264	7,977	15,194	3,677	6,403	6,469	3,461	22,979	2,906	3,127	1,232	164,278
July	38,827	7,175	18,315	6,880	8,548	8,319	11,229	4,581	6,327	6,872	3,567	21,563	2,767	568	1,232	147,624
Aug.	39,250	6,940	17,991	6,100	7,495	15	13,760	4,584	6,913	5,414	3,610	19,942	2,584	2,756	1,176	140,501
Sept.	43,269	10,908	16,256	5,192	7,849	8,202	15,700	4,367	5,692	6,942	3,587	22,632	2,184	2,369	1,120	158,285
Oct.	45,467	12,598	11,968	5,074	7,940	9,308	17,130	4,639	7,121	9,242	3,522	22,482	3,560	2,410	1,176	164,818
Nov.	40,486	10,645	17,067	6,448	9,495	9,068	17,785	4,825	6,914	11,155	3,555	20,148	2,625	2,519	1,120	165,406
Dec.	44,042	11,076	20,902	5,344	10,342	10,351	18,370	5,101	7,069	11,212	3,769	21,492	4,002	2,779	1,120	179,309
Total	575,612	130,886	246,443	80,999	119,192	111,337	223,973	60,860	77,490	92,903	52,915	271,654	42,266	32,359	16,492	1,955,753
1959																
Jan.	43,662	14,073	19,031	4,951	10,761	6,694	18,658	4,636	6,215	4,082	6,086	24,470	2,575	1,068	1,344	169,256
Feb.	39,498	12,740	15,472	2,662	9,460	5,812	17,869	4,437	6,020	8,596	6,474	22,037	2,319	1,765	1,344	157,928
Mar.	39,238	13,704	16,305	3,424	8,447	6,733	17,553	3,168	6,196	8,153	6,889	20,144	1,905	2,429	1,344	156,914
April	40 606	13,655	16,621	4,438	8.038	5,541	17,141	4,942	6,491	6,876	6,615	23,919	2,726	2,155	1,344	162,611
May	39,101	13,357	16,934	6,606	8,797	7,363	17,728	3,614	7,435	8,369	6,137	23,499	2,050	1,784	1,344	165,602
June	37,459	12,997	20,000	6,540	9,125	6,976	18,128	2,453	6,510	7,854	6,349	25,151	1,552	926	1,344	164,815
July	32,882	8,096	17,099	6,401	8,734	6,065	16,381	4,384	6,074	2,221	5,303	19,125	2,859	1,749	1,344	139,291
Aug.	25,589	7,357	19,086	4,267	7,547	6,581	15,256	3 354	6,049	....	5,344	21,168	862	2,863	1,344	.....
Sept.	14,801	....	14,320	4.354	7,217	6,164	16,466	4,502	4,728	....	5,326	....	3,567	2,352	1,344	.....
Oct.	18,892	....	17,986	6,093	....	....	....	....	....	....	....	.....	....	....	1,344	.....

(a) Production credited to Australia includes lead refined in England from Australian base bullion.

World Production of Slab Zinc

(American Bureau of Metal Statistics)

(In Tons of 2,000 Pounds)

	United States (a)	Can. (b)	Mexico	Peru (b-c)	Belgium	France (a)	Fed. Rep. of Germany	Great Britain	Italy	Netherlands (b)	Norway	Spain	Yugoslavia	Japan (a)	Australia (b)	Rhodesia	Total (d)
1955																	
Total	1,031,018	257,008	61,879	18,943	233,623	123,623	197,024	90,917	77,761	31,202	49,724	26,244	15,175	122,965	113,221	31,248	2,534,457
1956																	
Total	1,062,954	255,601	62,136	10,428	251,906	124,105	204,961	90,784	80,407	32,123	53,170	25,224	15,434	153,821	117,445	32,396	2,630,383
1957																	
Total	1,574,500	247,356	62,354	35,772	259,701	148,455	202,627	85,348	81,179	32,786	52,787	24,279	30,256	152,145	123,587	33,040	2,691,699
1958																	
April	70,214	20,989	5,289	2,597	20,886	14,985	15,693	8,018	6,925	2,586	3,850	2,207	2,853	9,305	10,424	2,772	204,625
May	71,018	21,269	5,254	2,699	20,949	15,279	16,128	6,343	7,202	2,442	3,962	2,372	2,871	13,504	10,918	2,856	211,529
June	66,967	20,354	5,016	2,429	20,094	14,243	15,663	7,202	7,731	2,221	3,307	2,309	2,854	14,040	10,988	2,744	204,067
July	65,119	20,878	5,285	2,520	19,556	14,295	16,210	7,140	5,879	2,471	3,815	2,296	2,928	15,835	10,742	2,884	203,828
Aug.	62,297	21,152	5,216	2,822	18,308	14,253	16,204	6,689	5,991	2,533	3,798	2,259	2,820	12,420	11,075	2,912	.....
Sept.	63,705	20,531	5,025	2,640	17,961	12,232	15,635	6,887	5,991	2,533	3,793	2,259	2,820	12,420	11,075	2,912	199,142
Oct.	65,304	21,125	5,344	2,305	17,866	14,176	16,462	6,046	6,442	2,820	4,915	2,313	2,793	14,436	11,045	2,940	203,169
Nov.	65,174	20,274	5,197	2,625	18,696	13,274	16,196	6,158	5,874	2,249	4,669	2,244	3,370	13,501	10,508	2,828	197,481
Dec.	75,503	21,705	5,537	2,686	19,402	13,844	17,090	7,564	6,344	2,332	4,755	2,262	2,684	12,473	10,860	2,856	213,093
Total	892,607	254,661	18,354	34,685	257,540	177,422	210,408	80,494	5,955	2,841	54,423	26,750	34,446	166,883	128,548	39,508	2,464,639
1959																	
Jan.	76,481	21,456	5,476	2,753	19,857	13,903	17,164	5,955	5,617	2,693	4,826	2,028	2.647	11,679	10.541	2 800	211,506
Feb.	71,174	19,709	4,915	1,497	19,838	13,491	15,632	6,123	4,735	2,927	4,928	1,926	2,510	14,105	9,617	2,548	199,495
Mar.	79,918	22,135	5,439	2,363	20.215	14,230	17,325	7,797	6,801	2.921	4.917	2 369	3,014	13.217	10,759	2,800	221.316
Apr.	76,393	21,512	5,225	2,502	20,408	14,087	16,426	6,030	7,039	2,816	3,621	2,239	2,509	15,645	10,472	2,716	216,378
May	77,489	21 147	5,108	2.545	21,181	13,902	16,633	6,595	7,790	2,823	4,798	2,273	2,701	16,171	11,137	2,744	226,057
June	75,544	21 250	4,776	2,524	21,004	14.120	16,185	8,271	7,164	2,899	4,759	2,180	2,083	15,873	10,899	2,716	218,131
July	73,101	21,055	5,038	2,634	20,100	14,262	16,325	6,112	7,303	2,917	4,539	2,057	3,796	16,754	11,189	2,856	.....
Aug.	69,768	21.588	4,965	2,504	19,472	14,138	16,585	6,507	7,370	2,968	4,646	2,198	....	15,305	11,293	2,912	.....
Sept.	62,202	20,744	4,935	2,537	19,387	11,883	16,366	7,892	6,819	2,928	4,708	2,208	....	15,133	10,985	2,800	.....
Oct.	63 938	21,744	5,084	2,545	....	....	.....	5,657	....	....	4 458	....	....	....	.....	2,884	.....

(a) Partially electrolytic. (b) Entirely electrolytic. (c) Beginning 1954 both electrolytic and electrochemic. (d) The above totals omit production in Russia Czechoslovakia, Poland and in Argentina.

U. K. Stocks of Zinc

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

At start of:	Virgin Zinc 1958	Virgin Zinc 1959	Zinc Conc. 1958	Zinc Conc. 1959
Jan.	44,926	34,166	79,349	56,371
Feb.	43,308	34,805	82,125	58,518
Mar.	46,662	36,850	87,721	57,897
Apr.	46,608	38,457	84,631	52,151
May	47,251	38,643	80,964	47,936
June	50,539	37,713	74,470	41,954
July	49,613	38,297	71,553	45,640
Aug.	48,497	37,427	70,105	43,948
Sept.	45,590	40,358	63,909	42,385
Oct.	45,784	40,995	57,376	39,233
Nov.	39,341	35,994	53,371	39,948
Dec.	35,396	....	58,022	....

U. K. Zinc Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

(Gross Weight)	1959 Aug.	1959 Sept.	1959 Oct.
Zinc ore and concentrates	12,762	4,230	26,535
Zinc conc.*	5,311	5,433	†
Australia	3,961	2,461	...
Peru	556	1,119	...
Burma	698	607	...
Turkey	...	1,246	...
Other countries	96	...	...
Zinc and zinc alloys: (Gross Wt.)	12,594	17,095	12,599
Rhodesia-Nyasaland	200	225	225
Australia	...	1,452	..
Canada	5,788	5,842	6,079
Belgium	982	1,455	1,838
Germany (W.)	375	...	...
Netherlands	1,075	550	171
Soviet Union	551	300	1,556
United States	225	86	109
Belgian Congo	1,105	2,000	295
Other countries	2,293	5,185	2,326

* British Bureau of Non-Ferrous Metal Statistics. The estimated zinc content is not the content of the gross weight as officially reported for any comparable period.
† Not available.

U. K. Copper Exports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

(Gross Weight)	1959 Aug.	1959 Sept.	1959 Oct.
Copper unwrought —ingots, blocks, slabs, bars, etc.	7,284	10,359	5,787
Plates, sheets, rods, etc.	1,739	1,507	1,542
Wire (including uninsulated electric wire)	463	248	340
Tubes	828	787	1,443
Other copper, worked (including pipe fittings)	87	134	96
Total	10,401	13,035	9,208

Copper Consumption in United Kingdom

British Bureau of Non-Ferrous Metal Statistics

(In tons of 2,240 pounds)

	Unalloyed	Alloyed*	Total	Virgin	Scrap
1956 Total	388,167	251,312	639,479	500,794	138,685
1957 Total	407,326	234,158	641,484	507,493	133,991
1958					
June	39,277	18,141	57,418	46,080	11,338
July	36,743	17,091	53,564	42,373	11,191
August	28,416	13,756	42,181	33,073	9,108
September	42,813	18,596	61,408	52,018	9,390
October	43,402	21,788	65,190	53,937	11,253
November	40,987	19,232	60,219	47,932	12,287
December	37,580	19,118	56,698	45,968	10,730
Total	442,977	225,001	667,978	534,619	133,359
1959					
January	32,678	21,217	52,979	39,815	13,164
February	29,373	19,020	48,293	35,775	12,518
March	27,864	19,567	47,431	36,124	11,307
April	32,742	22,782	55,525	43,015	12,509
May	28,421	19,199	47,620	33,367	14,253
June	35,009	21,103	56,112	44,761	11,351
July	24,714	19,858	44,572	32,034	12,538
August	24,524	16,097	40,621	30,866	9,735
September	35,447	21,920	57,367	45,178	12,189
October	37,221	23,880	61,101	47,345	13,756

* Includes copper sulphate effective October, 1954.

U. K. Virgin Copper Stocks

(In long tons)

(British Bureau of Non-Ferrous Metal Statistics)

At start of: 1957	1958	1959
Jan.	59,614	91,477	64,184
Feb.	59,203	82,483	65,941
Mar.	62,120	89,147	65,875
Apr.	61,779	94,330	72,946
May	71,101	88,582	72,318
June	61,991	88,913	78,505
July	64,121	81,851	80,477
Aug.	81,146	84,756	81,986
Sept.	98,595	89,899	89,483
Oct.	100,815	85,092	77,803
Nov.	90,877	74,696	64,602
Dec.	81,657	69,023	....

U. K. Refined Lead Stocks

(British Bureau of Non-Ferrous Metal Statistics)

(In long tons)

At start of: 1957	1958	1959
Jan.	39,420	51,295	45,444
Feb.	41,433	49,134	48,102
Mar.	36,900	47,738	40,535
Apr.	34,877	40,547	53,289
May	44,933	37,509	62,286
June	40,804	34,608	63,135
July	42,148	40,518	57,810
Aug.	48,275	37,148	67,586
Sept.	51,435	43,758	66,048
Oct.	45,301	48,856	63,121
Nov.	50,371	40,216	56,697
Dec.	48,065	35,335	....

Zinc Imports and Exports By Principal Countries

(A.B.M.S.)

Reported in pigs, bars, etc.; metric tons except where otherwise noted.

	1959 July	1959 Aug.	1959 Sept.
IMPORTS			
U. S. (s.t.)	17,139	9,116	13,273
Canada (s.t.)	3	...	...
Belgium	81	...	...
Denmark	430	874	730
France	1,537	1,352	710
Germany, West*	7,436	...	...
Italy	449	703	..
Netherlands	824	549	...
Sweden	2,231	1,793	...
Switzerland*	977	903	1,777
U. K. (l.t.)	12,765	12,594	17,095
India† (l.t.)	7,477	3,358	1,618
EXPORTS			
U. S. (s.t.)	146	214	3,024
Canada (s.t.)	16,237	11,546	12,519
Belgium	11,412	...	...
Denmark	142	15	...
France	83	477	890
Germany, West*	1,335	...	...
Italy	1,333	771	...
Netherlands	1,046	2,175	...
Norway	2,426	...	...
Switzerland*	395	548	260
U. K.** (l.t.)	427	443	474
Northern Rhodesia† (l.t.)	2,658	3,620	1,683
Australia (l.t.)	3,938	2,763	3,835

* Includes scrap.
** Includes manufactures.
† British Bureau of Non-Ferrous Metal Statistics.

United Kingdom Tin Statistics

(British Bureau of Non-Ferrous Metal Statistics)

	Tin Content of Tin in Ore: Imports	Production*	Stock at end of period*	Tin Metal: Imports	Production*	Consumption	Exports & Re-exports	Stock at end of period
1957 Total	39,272	1,028	....	9,834	34,175	20,365	7,362	71,931
1958								
September	1,743	99	1,564	1,141	2,579	1,784	988	19,942
October	1,913	91	1,419	145	2,488	2,072	882	20,135
November	1,971	96	1,770	851	2,187	1,795	594	19,285
December	2,757	90	2,299	317	2,350	1,802	1,770	19,054
1958 Total	27,419	1,090	....	13,195	32,551	20,413	20,398	19,054
1959								
January	1,337	113	1,095	324	2,925	1,769	2,381	16,744
February	1,817	115	1,300	230	1,677	1,614	4,153	14,715
March	1,545	100	1,595	....	1,572	1,778	2,658	13,264
April	1,743	103	1,798	....	1,636	1,745	3,326	10,685
May	1,493	92	1,575	28	1,808	1,686	2,421	9,445
June	1,323	129	920	25	2,267	1,987	2,919	9,638
July	2,971	112	2,043	47	2,735	1,682	2,639	11,255
August	1,878	58	1,704	21	1,908	1,224	2,956	10,752
September	2,808	....	2,132	33	2,229	2,073	3,742	10,624

*As reported by International Tin Study Group. Production of Tin Metal includes production from imported scrap and residues refined on toll. Stocks exclude strategic stock but include official warehouse stocks.

Canada's Copper Output

(Dominion Bureau of Statistics)

(Refined Copper)

(In Tons)

	1956	1957	1958	1959
Jan.	26,653	25,469	32,868	24,664
Feb.	26,229	21,861	28,668	28,016
Mar.	26,750	27,663	29,239	32,427
Apr.	26,617	27,398	30,635	32,130
May	27,626	29,086	32,471	32,622
June	27,122	24,093	32,418	36,979
July	27,250	27,195	31,131	36,067
Aug.	29,219	26,943	30,867	35,045
Sept.	27,950	24,633	27,546	35,740
Oct.	29,696	30,312	22,572	....
Nov.	27,346	27,331	20,368	....
Dec.	28,716	31,604	19,033	....
Year	331,174	323,588	346,816	....

Canada's Copper Exports

(Dominion Bureau of Statistics)

(Ingots, bars, slabs and billets)

(In Tons)

	1956	1957	1958	1959
Jan.	15,981	20,582	26,883	10,620
Feb.	11,041	16,272	16,816	10,304
Mar.	12,276	14,270	18,662	11,025
Apr.	14,476	16,417	23,261	17,079
May	12,851	19,048	19,358	21,739
June	10,985	10,826	20,831	21,310
July	13,599	18,621	21,703	13,650
Aug.	14,710	21,980	15,881	15,155
Sept.	17,268	14,314	15,373	28,684
Oct.	13,896	13,110	20,341	....
Nov.	19,130	16,622	14,391	....
Dec.	18,630	16,282	11,138	....
Year	174,843	198,794	224,638	....

Canada's Lead Output

(Dominion Bureau of Statistics)

(Recoverable Lead)*

(In Tons)

	1956	1957	1958	1959
Jan.	16,002	14,032	17,117	17,118
Feb.	14,344	15,170	14,908	15,923
Mar.	16,857	16,940	15,421	17,389
Apr.	11,573	14,275	15,644	16,237
May	15,446	14,591	15,131	16,813
June	18,145	16,431	15,645	14,968
July	15,841	14,377	14,076	15,111
Aug.	16,104	14,679	12,260	14,104
Sept.	15,760	15,869	15,401	12,420
Oct.	16,725	14,151	14,564	....
Nov.	14,865	15,879	16,680	....
Dec.	16,056	15,296	18,248	....
Year	188,971	171,690	185,095	....

* New base bullion from Canadian ores plus recoverable lead in ores or concentrates shipped for export.

Canada's Lead Exports

(Dominion Bureau of Statistics)

(In Pigs)

(In Tons)

	1956	1957	1958	1959
Jan.	4,888	8,946	4,752	5,034
Feb.	3,856	6,633	1,553	6,377
Mar.	4,007	7,044	9,497	11,831
Apr.	7,636	7,314	7,450	7,836
May	7,214	9,676	7,764	12,230
June	6,632	7,210	4,036	15,610
July	9,696	4,682	12,629	3,478
Aug.	4,713	6,416	7,232	4,023
Sept.	9,908	8,467	5,125	3,895
Oct.	9,072	7,761	10,320	....
Nov.	9,227	6,175	10,641	....
Dec.	2,734	4,217	11,352	....
Year	79,633	84,541	92,351	....

Canada's Zinc Output

(Dominion Bureau of Statistics)

(Refined Zinc)

(In Tons)

	1956	1957	1958	1959
Jan.	21,696	20,340	21,801	21,456
Feb.	20,356	19,808	19,743	19,709
Mar.	22,010	21,941	22,314	22,135
Apr.	21,339	20,504	20,989	21,512
May	21,790	20,564	21,269	21,147
June	20,780	19,928	20,353	21,250
July	21,691	20,061	20,873	21,055
Aug.	21,354	20,305	21,152	21,588
Sept.	20,691	20,247	20,530	20,744
Oct.	21,412	20,892	21,125	....
Nov.	20,470	20,933	20,273	....
Dec.	22,012	21,823	21,705	....
Year	255,607	247,351	252,157	....

Canada's Zinc Exports

(Dominion Bureau of Statistics)

(Slabs in Tons)

	1956	1957	1958	1959
Jan.	15,550	19,304	17,349	13,565
Feb.	11,757	16,618	8,376	12,675
Mar.	8,822	14,923	19,636	14,617
Apr.	14,317	17,131	16,346	12,789
May	11,357	16,680	15,121	11,049
June	15,296	16,157	7,776	20,298
July	15,499	12,912	27,394	23,122
Aug.	13,070	20,520	15,906	18,464
Sept.	19,732	17,671	8,670	14,367
Oct.	20,792	16,735	22,810	....
Nov.	21,411	17,225	17,978	....
Dec.	16,125	16,131	18,344	....
Year	183,728	202,007	195,707	....

Canada's Silver Exports

(Dominion Bureau of Statistics)

(In ores and concentrates)

(Fine Ounces)

	1957	1958	1959
Jan.	253,940	634,715	185,367
Feb.	380,463	208,149	329,742
Mar.	521,849	350,827	425,973
Apr.	431,646	284,971	989,593
May	523,228	376,082	564,017
June	468,559	438,253	871,570
July	844,545	529,770	728,598
Aug.	811,530	279,511	688,042
Sept.	861,857	583,570	763,017
Oct.	432,000	323,475	.....
Nov.	263,273	217,892	.....
Dec.	186,569	871,573	.....
Year	5,979,459	5,098,788	.....

Canada's Silver Output

(Dominion Bureau of Statistics)

(In Ounces)

	1957	1958	1959
Jan.	2,158,631	2,529,583	3,094,440
Feb.	2,051,679	2,294,655	2,264,903
Mar.	2,346,316	2,448,698	2,782,307
Apr.	2,225,638	2,558,958	2,691,503
May	2,111,185	2,650,665	2,499,149
June	2,208,584	2,527,632	2,676,937
July	2,383,390	2,385,687	2,867,957
Aug.	2,592,468	2,884,154	2,518,288
Sept.	2,382,121	2,856,304	2,440,163
Oct.	2,817,358	2,390,027	.....
Nov.	2,566,519	2,643,790	.....
Dec.	2,537,984	2,917,528	.....
Year	28,361,873	31,087,681	.....

Canada's Nickel Output

(Dominion Bureau of Statistics)

(In Tons)

	1956	1957	1958	1959
Jan.	14,985	16,609	16,710	8,047
Feb.	14,997	15,027	15,896	12,616
Mar.	15,504	16,733	15,853	14,922
Apr.	14,431	15,347	15,163	15,493
May	15,203	16,225	15,231	16,622
June	14,492	15,447	14,603	16,599
July	15,125	15,878	12,851	16,199
Aug.	14,852	16,756	12,597	16,784
Sept.	14,530	15,604	11,786	16,205
Oct.	15,762	15,628	3,682	....
Nov.	15,062	14,587	3,178	....
Dec.	14,824	15,096	3,298	....
Year	178,767	188,962	140,842	....

Canadian Copper Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1959		
	Aug.	Sept.	Oct.
Ore, matte, regulus, etc. (content)	4,605	2,629	1,699
United States	304	453	4
Belgium	116	139	...
Germany (W.)	118	...	...
Norway	1,355	1,852	1,214
United Kingdom	75	185	88
Japan	2,637	...	393
Ingots, bars, billets, anodes	15,155	28,684	21,348
United States	7,224	15,661	11,018
Belgium	...	280	280
France	168	1,037	140
Germany (W.)	1,204	784	1,148
Greece	...	...	224
Italy	308	504	224
Netherlands	727	812	112
Portugal	112	...	56
United Kingdom	4,650	8,556	7,220
India	761	1,049	924
Other countries	1	1	2
Total Exports:			
Crude & refined	19,760	31,313	23,047
Old and scrap	469	852	563
Rods, strips, sheet & tubing	1,155	1,861	1,321

Canadian Zinc Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1959		
	Aug.	Sept.	Oct.
Ore (zinc content)	18,464	14,367	12,518
United States	16,609	10,458	10,194
Belgium	1,318	3,571	...
Germany (W.)	...	338	...
Netherlands	537	...	...
Japan	...	...	2,324
Slab zinc	11,546	12,519	13,505
United States	6,130	6,960	7,741
Chile	28	..	...
United Kingdom	5,002	5,497	5,578
Korea	386	62	186
Total Exports:			
Ore and slabs	30,010	26,886	26,023
Zinc scrap, dross, ashes	379	777	394
United States	161	47	165
Belgium	...	730	100
Germany (W.)	111	...	...
Netherlands	107	...	103
Japan	...	...	26

French Copper Imports

(A.B.M.S.)

(In metric tons)

	1959		
	Aug.	Sept.	Oct.
Crude copper for refining (blister, black and cement)	...	974	813
United Kingdom	...	161	...
Belgian Congo	...	813	813
Refined	13,376	6,166	12,955
United States	1,923	718	3,451
Canada	480	813	762
Chile	1,975	...	750
Belgium	3,634	2,488	4,777
Germany (W.)	...	86	1
Norway	127	127	127
Sweden	22	...	...
United Kingdom	89	...	...
Belgian Congo	3,505	832	2,579
Rhodesia-Nyasaland	1,621	1,102	508

Canadian Lead Exports

(Dominion Bureau of Statistics)

(In tons of 2,000 lbs.)

	1959		
	Aug.	Sept.	Oct.
Ore (lead content)	7,945	6,081	1,760
United States	2,373	2,925	1,760
Belgium	2,768	3,156	...
Germany (W.)	2,804	...	...
Refined lead	4,024	3,895	4,884
United States	3,847	3,524	1,381
United Kingdom	84	280	3,488
Korea	...	49	...
Other countries	93	42	15
Total Exports:			
Ore and refined	11,969	9,976	6,644
Lead scrap	195	367	384

Copper Imports and Exports By Principal Countries

(A.B.M.S.)

Reported in ingots, slabs, etc.; metric tons except where otherwise noted.

	1959		
	July	Aug.	Sept.
IMPORTS			
U. S. (blist., s.t.)	27,860	18,837	25,019
(ore, etc., s.t.)	5,331	6,301	10,660
(ref., s.t.)	10,742	12,935	40,284
Belgium*	15,242	...	...
Denmark	469	401	97
France (crude)	406	...	974
(refined)	14,613	13,376	6,166
Italy	7,422	5,937	...
Germany, West	24,280	...	...
Netherlands	2,809	1,450	...
Norway	205	...	...
Sweden	6,118	5,016	..
Switzerland	2,382	3,286	2,892
U. K. (l.t.)	32,958	35,921	38,040
India (blister/-ref., l.t.)†	3,572	3,146	4,119
EXPORTS			
U. S. (ore and unref., s.t.)	20	...	6
(refined, s.t.)	11,378	16,605	8,965
Canada (refined, s.t.)	13,650	15,155	28,684
Belgium*	14,221	...	...
Finland††	757	455	...
Germany, West	7,712	...	...
Norway	3,397	...	...
Sweden	2,159	1,267	...
U. K. (l.t.)	5,116	7,284	10,359
Turkey*	2,008	...	...
No. Rhodesia (blister & ref., l.t.)†	43,141	41,910	41,838

* Includes alloys.

† British Bureau of Non-Ferrous Metal Statistics.

†† Includes old.

Canada's Nickel Exports

(Dominion Bureau of Statistics)

(Refined, in oxides, matte, etc.)

(In Tons)

	1957	1958	1959
January	14,260	14,233	6,757
February	9,974	12,157	7,976
March	14,958	12,316	14,006
April	18,671	20,962	14,213
May	18,351	20,574	16,142
June	14,539	16,144	15,901
July	14,181	14,055	11,985
August	14,966	13,012	13,664
September	14,160	14,371	19,143
October	13,370	8,335	.....
November	16,620	3,001	.....
December	14,606	5,060	.....
Year	178,656	154,220	.....

French Zinc Imports

(A.B.M.S.)

(In metric tons)

	1959		
	Aug.	Sept.	Oct.
Ore (gross weight)	24,602	22,343	19,397
Belgium	256	13	494
Finland	2,000	2,000	...
Greece	4,217	...	...
Italy	1,576	5,934	5,029
Norway	...	...	508
Algeria	6,185	9,980	7,502
Morocco	10,368	2,179	5,864
Belgian Congo	...	2,196	...
Burma	...	41	...
Slabs, bars, blocks, etc.	1,352	710	728
Belgium	900	330	435
Germany (W.)	..	...	40
Italy	127	157	91
Norway	...	...	150
Algeria	...	...	12
Rhodesia & Nyasaland	325	223	...

French Metal Exports

(A.B.M.S.)

(In metric tons)

	1959		
	Aug.	Sept.	Oct.
LEAD			
Ore (gr. wt.)	114	716	83
Pig lead	26	117	200
Sweden	...	12	...
Switzerland	...	50	100
Other countries	26	55	100
Antimonial lead	105	24	71
ZINC			
Slabs, bars, blocks, etc.	477	890	689
COPPER			
Crude copper for refining (blister, black and cement)	133	146	566

U. K. Copper Imports

(British Bureau of Non-Ferrous Metal Statistics)

(In tons of 2,240 lbs.)

	1959		
	Aug.	Sept.	Oct.
(Gross Weight)			
Copper and copper alloys	35,921	38,040	37,023
U. of S. Africa	101	200	250
Rhodesia-Nyasaland	22,628	19,566	20,157
Canada	6,078	7,636	6,326
Belgium	5	4	3
Germany (W.)	27	24	25
Norway	200	550	300
Sweden	...	...	2
United States	2,022	1,521	465
Chile	4,850	8,000	9,025
Peru	...	...	175
Belgian Congo	...	...	254
Other countries	10	39	41
Of which:			
Electrolytic	24,267	28,061	25,283
Other refined	2,450	4,475	3,550
Blister or wrought	8,932	5,400	7,696
Wrought and alloys	272	104	494
Total	35,921	38,040	37,023

Nonferrous Castings

MONTHLY SHIPMENTS, BY TYPE OF METAL
(Bureau of Census — Thousands of Pounds)

	Aluminum	Copper	Magnesium	Zinc	Lead Die
1954 Total	607,764	834,557	25,572	474,741	18,396
1955 Total	833,058	1,011,748	27,892	781,254	21,045
1956 Total	801,136	966,473	36,168	88,069	20,734
1957 Total	751,856	875,389	30,322	663,330	23,791
1958					
April	44,948	59,311	2,215	35,796	1,467
May	44,093	57,506	2,422	36,447	1,655
June	40,701	57,124	2,205	38,132	1,971
July	38,818	51,124	2,200	32,765	1,394
August	45,034	57,790	1,869	35,860	1,804
September	52,796	64,447	2,804	47,127	1,725
October	55,699	74,012	2,627	45,045	1,708
November	55,793	62,476	2,615	48,431	1,409
December	59,487	67,905	2,612	55,600	1,497
Total	596,816	739,915	27,228	508,297	18,920
1959					
January	62,927	66,874	2,151	53,347	1,571
February	62,486	69,589	2,162	48,779	1,285
March	73,351	78,641	2,129	57,600	1,765
April	72,976	82,799	2,455	57,325	1,862
May	68,268	78,413	2,370	60,656	2,025
June	66,471	79,730	2,484	56,128	2,007
July	56,911	67,073	2,265	46,756	1,858
August	55,904	68,979	2,243	46,566	1,898
September	66,193	76,045	2,263	58,144	2,218

Copper Castings Shipments

BY TYPE OF CASTING
(Bureau of Census) (Thousands of Pounds)

	Total	Sand	Permanent Mold	Die	All Other
1952 Total	1,009,910	910,862	63,865	8,259	26,924
1953 Total	990,496	888,369	61,316	10,077	30,734
1954 Total	824,557	751,804	48,849	6,480	27,394
1955 Total	1,011,748	907,852	63,041	8,541	31,408
1956 Total	966,113	866,404	57,522	10,023	32,134
1957 Total	875,389	789,819	44,746	10,776	30,048
1958					
February	58,356	52,579	3,202	796	1,779
March	60,157	54,007	3,395	823	1,932
April	59,311	53,271	3,385	949	1,705
May	57,506	51,634	3,077	891	1,904
June	57,124	51,967	3,001	839	1,317
July	51,124	46,636	2,351	792	1,345
August	57,590	52,981	2,425	682	1,702
September	64,447	58,435	2,888	876	2,248
October	74,012	67,564	3,239	790	2,419
November	62,746	57,386	2,604	810	1,946
December	67,905	61,119	3,535	1,059	2,192
Total	739,985	667,255	36,529	10,201	22,681
1959					
January	66,874	59,856	3,572	1,216	2,230
February	66,589	62,593	3,557	1,176	2,263
March	78,641	69,472	4,333	1,361	3,475
April	82,799	73,567	4,640	1,328	3,264
May	78,413	69,351	4,363	1,291	3,408
June	79,730	70,836	4,421	1,175	3,298
July	69,073	61,650	3,869	946	2,608
August	68,979	60,346	4,410	993	3,230
September	76,045	66,517	4,810	1,138	3,580

Nickel Averages

Electro, cathode sheets, 99.00%, f.o.b. refinery, duty included
(Cents per pound)

	1956	1957	1958	1959
Jan.	64.50	74.00	74.00	74.00
Feb.	64.50	74.00	74.00	74.00
Mar.	64.50	74.00	74.00	74.00
Apr.	64.50	74.00	74.00	74.00
May	64.50	74.00	74.00	74.00
June	64.50	74.00	74.00	74.00
July	64.50	74.00	74.00	74.00
Aug.	64.50	74.00	74.00	74.00
Sept.	64.50	74.00	74.00	74.00
Oct.	64.50	74.00	74.00	74.00
Nov.	64.50	74.00	74.00	74.00
Dec.	72.48	74.00	74.00	....
Aver.	65.165	74.00	74.00	....

Platinum Averages

N. Y. MONTHLY QUOTATIONS
(Dollars per Troy Ounce)

	1956	1957	1958	1959
Jan.	106.30	101.92	77.85	52.57
Feb.	104.34	98.59	74.82	59.25
Mar.	104.23	93.50	72.096	77.10
Apr.	103.92	93.45	70.72	77.18
May	105.23	92.865	67.34	77.50
June	106.50	92.02	66.18	77.50
July	106.50	90.265	64.35	78.00
Aug.	105.76	84.426	60.94	78.00
Sept.	105.50	84.00	59.50	78.00
Oct.	104.85	84.00	57.327	78.00
Nov.	104.50	83.80	56.41	78.44
Dec.	104.50	78.70	53.154	....
Aver.	105.18	89.79	65.07	....

Spot Straits Tin

(Straits, Open Market, N. Y.)
Monthly Average Prices

	1956	1957	1958	1959
Jan.	105.036	101.511	92.94	99.411
Feb.	100.803	101.132	93.915	102.785
Mar.	100.786	99.643	94.452	103.042
Apr.	92.268	99.304	92.988	102.505
May	96.994	93.347	94.512	103.125
June	94.589	98.05	94.708	104.25
July	96.143	96.52	94.892	102.337
Aug.	99.049	94.261	94.988	102.333
Sept.	103.809	93.406	94.101	102.44
Oct.	106.023	91.838	96.523	102.238
Nov.	110.921	89.236	99.118	101.021
Dec.	104.268	92.35	98.989	....
Aver.	101.475	96.301	95.177	....

Prompt Tin Prices

(Straits, Open Market, N. Y.)
Monthly Average Prices
(Cents per Pound)

	1956	1957	1958	1959
Jan.	104.768	101.347	92.653	99.351
Feb.	100.586	100.257	93.763	102.708
Mar.	100.524	99.476	94.363	103.042
Apr.	99.145	99.286	92.988	102.505
May	96.853	98.335	94.512	103.107
June	94.488	98.025	94.619	104.142
July	96.131	96.44	94.892	102.337
Aug.	98.924	94.159	94.976	102.345
Sept.	103.559	93.313	94.054	102.435
Oct.	105.716	91.848	96.455	102.238
Nov.	110.329	89.236	98.985	100.972
Dec.	104.00	92.34	98.96	....
Aver.	101.252	93.672	95.069	....

Quicksilver Averages

N. Y. Monthly Averages
Virgin, Dollars per 76-lb Flask

	1956	1957	1958	1959
Jan.	277.80	256.00	224.35	219.50
Feb.	270.29	256.00	229.39	219.50
Mar.	261.40	256.00	232.096	223.57
Apr.	267.22	256.00	233.06	239.52
May	267.675	256.00	229.48	245.86
June	260.69	256.00	229.00	241.64
July	256.06	256.00	230.25	236.74
Aug.	256.00	252.20	240.27	232.524
Sept.	256.00	248.58	241.12	225.429
Oct.	255.92	234.48	235.94	224.548
Nov.	255.13	228.33	230.05	217.944
Dec.	256.00	226.50	223.54	....
Aver.	261.71	248.51	230.96	....

Primary Aluminum Output, Shipments and Stocks

(U. S. Department of Interior)

	Stocks beginning of month short tons	Production short tons	Sold or Used— Short tons	Value f. o. b. plant	Stocks end of month short tons
1957 Total	....	1,647,714	1,579,035	.....	.....
1958					
July	168,096	118,541	134,083	64,726,335	152,554
August	152,554	125,416	132,765	64,611,494	145,205
September	145,205	124,714	146,870	71,641,275	125,049
October	124,274	139,836	139,908	68,881,146	124,202
November	124,202	140,962	126,619	62,133,129	138,545
December	138,545	152,201	145,125	70,946,494	145,721
Total	....	1,565,556	1,595,067	.....	.....
1959					
January	146,086	156,700	127,678	$62,375,824	175,108
February	175,108	142,116	133,397	65,668,578	183,827
March	183,827	157,189	181,839	82,304,609	159,177
April	159,177	155,213	182,930	90,070,280	131,460
May	131,460	163,857	182,607	89,672,327	112,710
June	112,710	167,323	191,421	93,955,552	88,612
July	88,612	179,194	187,387	91,635,864	80,419
August	80,419	172,816	159,206	77,711,678	94,029
September	74,029	168,206	153,170	74,809,052	109,095

Aluminum Wrought Products

PRODUCERS' MONTHLY NET SHIPMENTS

(Bureau of Census — Thousands of Pounds)

	Total	Sheet, Plate, Foil, Rod & Bar	Wire & Cable	Extruded Shapes & Tubing	Powder & Paste
1955 Total	2,805,500	1,542,368	365,391	812,311	35,854
1956 Total	2,870,101	1,577,601	398,602	782,398	28,017
1957 Total	2,677,423	1,396,502	399,040	789,430	28,187
1958					
April	210,477	118,793	22,178	62,737	1,954
May	217,299	115,660	27,361	67,376	2,389
June	228,587	118,767	28,674	74,580	2,248
July	229,654	126,160	24,678	72,194	2,642
August	213,548	115,376	23,581	67,953	3,154
September	231,168	125,937	23,287	75,269	2,665
October	254,023	128,967	24,442	85,038	2,163
November	216,249	121,190	17,771	71,666	1,723
December	235,377	130,474	26,253	72,979	1,806
Total	2,624,911	1,441,385	285,355	821,249	25,742
1959					
January	235,463	132,361	26,480	70,309	2,246
February	230,733	131,564	21,740	71,364	2,028
March	271,642	161,285	21,940	81,276	2,578
April	293,554	166,942	25,468	93,475	3,178
May	320,786	184,664	28,532	99,308	3,641
June	341,389	195,476	30,156	107,038	3,901
July	373,060	211,850	39,902	111,661	4,708
August	247,833	126,512	29,411	85,380	2,537
September	262,749	140,313	25,843	89,986	2,419

Aluminum Castings Shipments

(Bureau of Census)

BY TYPE OF CASTING

(Thousands of Pounds)

	Total	Sand	Permanent Mold	Die	All Other
1954 Total	609,066	155,738	213,968	232,726	6,800
1955 Total	833,058	171,757	298,115	354,804	8,282
1956 Total	801,036	171,763	245,421	376,108	7,736
1957 Total	751,656	144,121	232,326	369,086	...
1958					
June	40,701	8,644	13,679	18,292	...
July	38,818	8,658	12,342	17,714	...
August	45,034	9,034	14,426	21,505	...
September	52,796	10,261	16,241	26,254	...
October	55,699	10,932	17,189	27,511	...
November	55,793	10,539	16,942	28,264	...
December	59,487	10,874	18,970	29,579	...
Total	596,790	117,421	186,949	292,599	...
1959					
January	62,927	10,907	20,606	21,349	...
February	62,846	10,627	21,127	31,021	...
March	73,351	12,412	26,964	33,949	...
April	72,976	12,700	26,153	33,992	...
May	68,268	11,979	25,283	30,877	...
June	66,471	12,306	24,927	29,092	...
July	56,911	11,581	20,410	24,786	...
August	55,904	11,130	17,824	26,818	...
September	66,193	12,309	21,506	32,239	...

Virgin Aluminum

Ingot (30 lb.) 99½% Plus, Delivered

Monthly Average Prices

(Cents per pound)

	1956	1957	1958	1959
Jan.	24.40	27.10	28.10	26.80
Feb.	24.40	27.10	28.10	26.80
Mar.	24.60	27.10	28.10	26.80
Apr.	25.90	27.10	26.10	26.80
May	25.90	27.10	26.10	26.80
June	25.90	27.10	26.10	26.80
July	25.90	27.10	26.10	26.80
Aug.	26.70	28.10	26.77	26.80
Sept.	27.10	28.10	26.80	26.80
Oct.	27.10	28.10	26.80	26.80
Nov.	27.10	28.10	26.80	26.80
Dec.	27.10	28.10	26.80	....
Aver.	26.008	27.517	26.889	....

Magnesium Wrought Products Shipments

(Bureau of Census)

(Thousands of Pounds)

	1956	1957	1958	1959
Jan.	2,188	2,130	1,271	1,271
Feb.	1,901	2,522	1,280	1,691
Mar.	1,946	2,388	1,398	1,717
Apr.	2,279	2,511	1,479	2,089
May	2,462	2,230	1,443	1,644
June	2,302	1,881	1,709	1,946
July	2,002	1,428	1,227	1,681
Aug.	2,523	1,540	1,823	1,823
Sept.	2,031	1,501	1,807	1,807
Oct.	861	1,453	1,983	....
Nov.	2,141	1,230	1,662	....
Dec.	2,452	1,102	1,622	....
Total	24,975	21,915	18,702	....

Cadmium Averages

N. Y. Monthly Averages

Cents per lb. in ton lots

	1956	1957	1958	1959
Jan.	170.00	170.00	155.00	145.00
Feb.	170.00	170.00	155.00	145.00
Mar.	170.00	170.00	155.00	145.00
Apr.	170.00	170.00	155.00	120.00
May	170.00	170.00	155.00	120.00
June	170.00	170.00	155.00	120.00
July	170.00	170.00	155.00	120.00
Aug.	170.00	170.00	155.00	120.00
Sept.	170.00	170.00	152.60	120.00
Oct.	170.00	170.00	145.00	*140.00
Nov.	170.00	170.00	145.00	140.00
Dec.	170.00	166.40	145.00	....
Aver.	170.00	169.70	152.30	....

* As of Oct. 1, 1959, for lots of up to one ton.

Steel Ingot Production

(American Iron and Steel Institute)

Period	Estimated Production — All Companies OPEN HEARTH Net tons	% of capacity	BESSEMER Net tons	% of capacity	ELECTRIC Net tons	% of capacity	TOTAL Net tons	% of capacity	Calculated weekly production, all companies (net tons)
1954 Total	80,327,494	73.6	2,548,104	53.2	5,436,054	52.0	88,311,652	71.0	1,693,741
1956 Total	102,840,585	91.6	3,227,997	67.4	9,147,567	81.2	115,216,149	89.8	2,203,828
1957 Total	101,657,776	87.0	2,475,138	54.9	8,582,082	71.3	112,714,996	84.5	2,161,776
1958									
April	4,875,619	48.5	109,433	33.1	547,939	46.3	5,532,991	47.8	1,289,741
May	5,602,123	53.7	110,366	32.3	588,670	48.2	6,301,159	52.7	1,422,384
June	6,378,942	63.4	88,125	26.6	660,413	55.8	7,127,480	61.6	1,661,417
July	5,712,587	55.0	114,218	33.4	593,600	48.6	6,420,405	53.7	1,452,580
August	6,481,815	62.4	134,135	39.3	670,383	54.8	7,286,003	61	1,644,696
September	6,769,660	67.3	103,194	31.2	737,518	62.3	7,610,372	65.8	1,778,124
October	7,795,541	75.0	148,458	43.4	873,779	71.5	8,817,278	73.8	1,990,469
November	7,572,555	75.3	145,867	44.1	850,896	71.9	8,569,318	74.1	1,997,510
December	7,764,000	74.7	117,000	34.2	832,000	68.1	8,793,000	72.9	1,971,000
Total	75,888,392	62.0	1,396,348	34.7	7,972,623	55.4	85,257,363	69.6	1,635,162
1959									
January	8,280,985	77.1	120,005	39.5	729,675	63.7	9,317,385	74.3	2,103,247
February	8,540,000	88.0	129,000	47.0	757,000	73.1	9,603,000	84.8	2,401,000
March	10,216,474	95.1	184,892	60.9	929,784	81.1	11,567,745	92.3	2,611,229
April	9,884,332	95.0	196,000	66.2	964,850	87.0	11,281,920	93.0	2,629,818
May	10,117,968	94.2	200,887	66.1	1,024,401	89.4	11,600,581	92.5	2,618,441
June	9,521,053	91.6	185,794	63.2	941,056	84.8	10,907,634	89.9	2,542,572
July	4,540,182	42.2	66,433	21.9	526,025	45.9	5,227,129	41.7	1,182,608
August	1,171,342	10.9	.....	...	267,935	23.4	1,439,277	11.5	324,893
September	1,249,398	12.0	.....	...	285,619	25.8	1,535,017	12.7	358,649
October	1,385,490	12.9	.....	...	319,043	27.8	1,704,533	13.6	384,770
November	6,287,000	60.5	92,000	31.3	753,000	67.9	7,262,000	59.8	1,693,000

Blast Furnace Output

(American Iron and Steel Institute)

	net tons Pig Iron	Ferro-manganese & Spiegel	Total	% Capacity
1950				
Tot. Yr.	64,810,272	673,896	65,484,168	91.6
1951				
Tot. Yr.	70,487,880	745,381	71,233,761	98.3
1952				
Tot. Yr.	61,838,668	629,926	62,168,891	84.2
1953				
Total	74,987,721	655,028	75,642,749	95.5
1954				
Total	68,119,882	568,735	68,688,117	71.6
1955				
Total	77,114,978	685,753	77,800,831	92.7
1956				
Dec.	7,268,743	65,841	7,334,584	101.0
Total	75,301,134	664,341	75,965,475	88.9
1957				
Jan.	7,209,547	72,826	7,282,373	98.8
Feb.	6,596,133	61,973	6,658,106	100.0
Mar.	7,179,100	67,779	7,246,879	98.3
Apr.	6,810,102	60,784	6,870,886	96.3
May	6,879,881	65,566	6,945,447	94.2
June	6,593,326	66,266	6,659,592	93.3
July	6,625,901	66,031	6,691,932	90.8
Aug.	6,719,763	61,988	6,781,751	92.0
Sept.	6,569,074	58,837	6,627,911	92.9
Oct.	6,454,450	65,028	6,519,478	88.4
Nov.	5,711,242	66,637	5,779,879	81.0
Dec.	5,212,624	69,175	4,854,444	62.8
Total	78,557,011	782,660	79,339,671	91.4
1958				
Jan.	4,785,269	69,175	4,854,444	62.8
Feb.	4,016,276	47,953	4,064,229	58.2
Mar.	4,418,778	45,175	4,463,953	57.8
April	3,787,907	39,302	3,827,209	51.2
May	4,048,328	25,468	4,073,796	52.7
June	4,396,285	26,463	4,422,748	59.1
July	4,277,515	26,668	4,304,183	55.7
Aug.	4,799,955	31,374	4,831,329	62.1
Sept.	5,041,042	31,348	5,072,390	67.8
Oct.	5,835,995	36,963	5,872,958	76.0
Nov.	5,907,888	39,275	5,946,163	79.5
Dec.	6,025,385	47,505	6,072,890	78.6
Total	57,298,644	465,456	57,298,644	63.5
1959				
Jan.	6,260,395	48,572	6,211,823	77.9
Feb.	6,047,398	45,274	6,192,672	85.3
March	7,461,760	48,291	7,510,051	93.4
April	7,338,372	54,234	7,392,606	95.0
May	7,683,759	64,237	7,747,996	96.4
June	7,231,631	58,315	7,289,946	93.7
July	3,550,159	23,391	3,573,550	44.5

Steel Castings Shipments

(Bureau of Census)

	(Short Tons) Total	For Sale	For Own Use
1951	2,101,604	1,507,413	594,191
1952	1,925,116	1,476,352	448,767
1953	1,829,277	1,290,016	431,330
1954	1,184,096	880,158	303,938
1955	1,530,694	1,166,706	363,988
1956	1,931,987	1,512,290	416,697
1957			
July	122,018	90,037	31,981
Aug.	145,926	111,080	34,846
Sept.	139,002	105,611	33,391
Oct.	146,397	113,216	33,181
Nov.	127,115	98,436	28,679
Dec.	120,787	92,125	28,662
Total	1,766,191	1,261,301	406,444
1958			
Jan.	120,722	94,717	26,005
Feb.	103,297	79,708	23,589
Mar.	106,233	82,195	24,038
Apr.	91,464	69,121	22,343
May	87,002	66,086	20,916
June	92,681	71,624	21,237
July	68,802	48,618	10,184
Aug.	80,886	59,816	21,070
Sept.	85,277	64,586	20,691
Oct.	95,389	73,367	22,022
Nov.	85,267	65,788	19,479
Dec.	103,800	81,360	22,440
Total	1,114,939	859,125	255,814
1959			
Jan.	105,392	82,693	22,709
Feb.	110,280	86,013	24,267
Mar.	131,317	103,848	27,469
Apr.	134,344	104,890	29,454
May	135,359	105,804	29,555
June	143,624	111,725	31,899
July	106,790	83,541	23,249
Aug.	98,014	79,188	18,826
Sept.	99,731	79,963	19,768

Galvanized Sheet Shipments

(American Iron & Steel Institute)

(Net Tons)

	1956	1957	1958	1959
Jan.	269,464	235,902	186,649	279,244
Feb.	272,997	205,048	167,627	281,637
Mar.	291,193	206,836	195,885	311,961
Apr.	266,728	198,585	206,368	328,759
May	272,741	206,657	231,318	317,059
June	279,058	239,037	277,180	350,333
July	*	167,247	239,883	180,787
Aug.	276,048	186,790	253,263	.....
Sept.	256,803	183,952	258,723	.....
Oct.	278,637	212,886	290,157	.....
Nov.	255,135	190,380	253,909	.....
Dec.	239,173	159,363	266,472	.....
Total	2,957,991	2,392,637	2,828,848	.....

* Combined with August figures.

SHIPMENTS OF TIN-TERNEPLATE

(American Iron & Steel Institute)

(Net Tons)

	—Hot Dipped— 1958	1959	—Electrolytic— 1958	1959
Jan.	31,455	30,304	474,359	417,210
Feb.	29,451	24,602	397,861	442,625
Mar.	36,794	46,706	419,102	597,408
Apr.	43,670	54,906	468,568	689,998
May	37,628	64,110	402,521	689,064
June	42,850	62,965	429,761	673,819
July	45,481	36,381	422,776	244,719
Aug.	46,037	.....	464,439	.....
Sept.	43,217	.....	525,739	.....
Oct.	60,261	.....	763,361	.....
Nov.	14,596	.....	113,134	.....
Dec.	15,842	.....	150,942	.....
Total	447,396	.....	5,046,196	.....

Steel Ingot Operations

(Percentage of Capacity as Reported by American Iron & Steel Institute)

Week Beginning	1956	1957	1958	1959
Jan. 6	97.6	98.4	56.1	76.2
Jan. 13	98.6	96.4	57.0	73.6
Jan. 20	99.0	96.6	55.5	74.6
Jan. 27	100.4	97.6	54.0	72.6
Feb. 4	99.3	97.1	54.0	76.9
Feb. 11	99.1	97.7	53.5	83.8
Feb. 18	98.8	97.8	50.9	83.7
Feb. 25	98.8	96.0	54.6	88.5
Mar. 4	99.3	97.1	53.1	90.3
Mar. 11	100.0	93.8	52.4	92.0
Mar. 18	100.6	93.5	52.5	92.9
Mar. 25	99.5	92.4	50.6	92.9
Apr. 1	96.6	90.6	48.6	93.2
Apr. 8	97.7	90.3	48.5	93.3
Apr. 15	100.9	90.4	46.8	93.8
Apr. 22	100.2	88.7	47.9	93.5
Apr. 29	100.5	87.0	47.8	94.2
May 6	96.4	86.7	49.4	92.0
May 13	95.2	84.2	52.3	92.9
May 20	95.3	86.4	56.4	93.4
May 27	97.3	88.0	58.1	93.6
June 3	96.3	87.5	62.5	93.7
June 10	96.7	86.5	84.0	92.0
June 17	93.4	85.2	64.9	92.5
June 24	93.0	84.0	61.7	87.8
July 1	84.9	78.5	51.0	78.2
July 8	12.3	78.7	53.4	79.5
July 15	12.9	79.3	54.9	38.7
July 22	14.6	79.4	57.3	12.9
July 29	17.0	79.4	57.8	12.2
Aug. 5	16.9	79.8	58.8	11.2
Aug. 12	57.5	80.6	60.5	11.8
Aug. 19	87.5	82.1	62.6	11.3
Aug. 25	95.8	82.2	63.5	11.7
Sept. 2	97.0	81.0	61.7	11.5
Sept. 9	98.7	81.9	65.9	11.6
Sept. 16	100.6	82.1	65.6	12.6
Sept. 23	100.6	82.2	67.3	12.8
Sept. 30	101.6	82.6	70.4	12.8
Oct. 7	101.8	82.8	71.6	12.8
Oct. 14	100.9	80.9	74.2	13.0
Oct. 21	101.4	80.2	74.8	13.1
Oct. 28	101.2	79.7	75.0	13.1
Nov. 4	101.3	78.0	74.5	13
Nov. 11	100.6	77.7	74.5	45.6
Nov. 18	100.2	76.0	74.1	78.9
Nov. 25	100.1	72.1	73.7	89.7
Dec. 2	101.1	71.5	73.5	93.6
Dec. 9	101.3	69.2	73.5	96.5
Dec. 16	102.0	67.7	74.5	96.3
Dec. 23	94.3	53.7	74.5	...
Dec. 30	97.3	59.0	73.6	...

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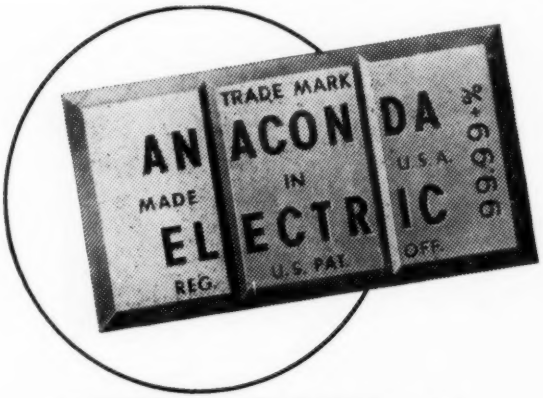

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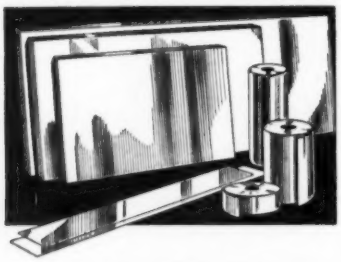

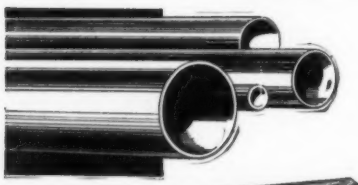

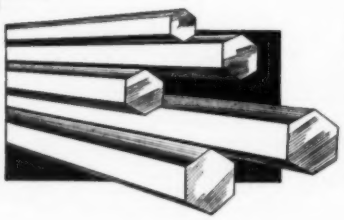

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